# COMPLETION REPORT
## SOIL INSPECTION/SAMPLING PLAN
## ATTACHMENT VIII – OTHER REMAINING AREAS

**HITACHI GLOBAL STORAGE TECHNOLOGIES, INC.**
**REDEVELOPMENT PROPERTY**
**5600 COTTLE ROAD, SAN JOSE, CALIFORNIA**

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## ACRONYMS

| | |
|---|---|
| AST | Aboveground Storage Tank |
| bgs | below ground surface |
| CalEPA | California Environmental Protection Agency |
| CCR | Current Conditions Report |
| CEL | Calscience Environmental Laboratories |
| CMS | Corrective Measures Study |
| COC | Chain of Custody |
| DCA | Dichloroethane |
| DCE | Dichloroethene |
| DHS | Department of Health Services |
| DJPA | David J. Powers & Associates |
| DTSC | Department of Toxic Substance Control |
| EIR | Environmental Impact Report |
| ESA | Environmental Site Assessment |
| FRP | Fiberglass Reinforced Plastic |
| GPA | General Plan Amendment |
| GST | Global Storage Technologies |
| HF | Hydrofluoric Acid |
| HHRA | Human Health Risk Assessment |
| HLA | Harding Lawson Associates |
| IBM | International Business Machines |
| IDW | Investigation Derived Waste |
| IT | International Technology Corporation |
| LQG | Large Quantity Generator |
| NMP | n-Methyl-2-Pyrrolidone |
| PCB | Polychlorinated Biphenyl |
| PCE | Tetrachloroethene |
| PD | Planned Development |
| PG&E | Pacific Gas and Electric |
| PID | Photoionization Detector |
| PPE | Personal Protective Equipment |
| PVC | Polyvinyl Chloride |
| R&D | Research and Development |
| RBTC | Risk-Based Target Concentration |
| RCRA | Resource Conservation and Recovery Act |
| RG | Remedial Goal |
| RO/DI | Reverse Osmosis/Deionized Water |
| RWQCB-SF | Regional Water Quality Control Board, San Francisco Bay Region |
| SCVWD | Santa Clara Valley Water District |
| SI/SP | Soil Inspection/Sampling Plan |

## ACRONYMS

| | |
|---|---|
| STL | Severn Trent Laboratories |
| STLC | Soluble Threshold Limit Concentration |
| SVOC | Semi-Volatile Organic Compound |
| TCA | 1,1,1-Trichloroethane |
| TCE | Trichloroethene |
| TEG | Transglobal Environmental Geochemistry |
| TPH | Total Petroleum Hydrocarbons |
| TTLC | Total Threshold Limit Concentration |
| US | United States |
| USCS | Unified Soil Classification System |
| USEPA | United States Environmental Protection Agency |
| VOC | Volatile Organic Compound |
| WET | Waste Extraction Test |
| WV | Waste Vault |

| | |
|---|---|
| kV | kilovolt |
| mg/kg | milligram per kilogram |
| mL/min | milliliter per minute |
| MW | megawatt |
| µg/kg | microgram per kilogram |
| µg/L | microgram per liter |

# 1.0 INTRODUCTION

ENVIRON International Corporation (ENVIRON), an environmental consulting firm, has prepared this Completion Report on behalf of Hitachi Global Storage Technologies, Inc. (Hitachi GST) for a portion of their property located at 5600 Cottle Road, San Jose, California ("the Site"). Hitachi GST is planning redevelopment activities for this portion of the Site. This Completion Report presents the results of the implementation of the Soil Inspection/Sampling Plan (SI/SP), Attachment VIII—Other Remaining Areas (ENVIRON 2005a). In addition, this Completion Report presents the results of inspection, sampling, and removal activities that were conducted at the Site in accordance with the Corrective Measures Study (CMS) Report prepared by ENVIRON in June 2006.

## 1.1 Site Overview

In June 2005, David J. Powers & Associates (DJPA) prepared an Environmental Impact Report (EIR) for the proposed General Plan Amendment (GPA) and Planned Development (PD) Zoning on the approximately 321-acre Hitachi GST Site. The City of San Jose Planning Commission certified the Final EIR on June 6, 2005 (City of San Jose 2005a, 2005b). The Site, which is currently owned by Hitachi GST, was formerly owned and operated by International Business Machines (IBM). The location of the Site is shown on Figures 1.1 and 1.2. The Site layout prior to redevelopment is shown on Figure 1.3.

Hitachi GST has moved its research and development (R&D) and administrative office operations to a different location in San Jose (3403 Yerba Buena Road). A portion of land has been rezoned and will be sold and redeveloped into a mixed residential, commercial, and recreational open space area. The area to be redeveloped is divided into five Parcels (Parcel O-1 through O-5), as shown on Figure 1.4. In addition, Hitachi GST will be transferring ownership of Endicott Boulevard/Tucson Way, which borders the Site to the north, to the City of San Jose. For the purposes of this report, Parcels O-1 through O-5 and Endicott Boulevard/Tucson Way are hereafter referred to as "the Redevelopment Property". The Redevelopment Property is approximately 143 acres.

Hitachi GST plans to continue industrial operations (developing and manufacturing of computer storage devices) on the remaining portion of the Site, termed the Core Area. All manufacturing-related activities currently located on Parcels O-1 through O-5 have been moved to the Core Area under the redevelopment plan. The Core Area is also shown on Figure 1.4.

The Hitachi GST Site is a large quantity generator (LQG) of hazardous waste and also maintains a Resource, Conservation and Recovery Act (RCRA) Permit for on-site storage and treatment of hazardous waste. The RCRA Permit encompasses the full 321 acres of the Site. Hitachi GST is working with the California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) to remove the Redevelopment Property from the RCRA Permit.

## 1.2 Environmental Investigation Objectives

As part of the EIR, ENVIRON prepared a screening human health risk assessment (Screening HHRA) to evaluate the potential impacts on human health for Parcels O-1 through O-5. The overall

objective of the Screening HHRA was to identify potential areas within these parcels needing further investigation and/or mitigation prior to redevelopment. To accomplish this objective, the following steps were completed in the Screening HHRA for Parcels O-1 through O-5: 1) determine the nature of historical operations and chemical use; 2) compile and collect data regarding groundwater, soil gas, and soil conditions; 3) develop risk-based target concentrations (RBTCs) for comparison to groundwater, soil gas and soil data; and 4) compare the RBTCs to the data collected from each parcel to determine areas requiring further investigation or mitigation measures. The RBTCs correspond to the level that would pose a *de minimis* health risk to future on-site populations.

The Screening HHRA was followed by a Draft Current Conditions Report (CCR) (ENVIRON 2005b), which addressed Parcels O-1 through O-5 and Endicott Boulevard/Tucson Way. The Draft CCR plus the letter response to comments received from DTSC on the report (DTSC 2006) constitute the final CCR.

Additional inspection/investigation needed to fill data gaps identified in the Screening HHRA/CCR were addressed in the SI/SP and its associated attachments. The areas to be inspected/investigated were divided into the following nine categories:

| | |
|---|---|
| Attachment I | Roads/Parking Lots |
| Attachment II | Aboveground Storage Tanks Associated with Emergency Generators |
| Attachment III | Buried Concrete Trenches, Building 028J, and Former Waste Vaults 02-04 |
| Attachment IV | Hydraulic Elevators |
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| Attachment VI | Former Orchard Areas |
| Attachment VII | Endicott Boulevard/Tucson Way |
| Attachment VIII | Other Remaining Areas |
| Attachment IX | Soil Gas Evaluation for Parcels O-1 and O-2 |

This Completion Report presents the results of implementation of Attachment VIII – Other Remaining Areas of the SI/SP.

The SI/SP was followed by the CMS Report (ENVIRON 2006). The CMS was prepared to address the presence of potential contamination in soil that may be encountered during building demolition and/or earthwork activities within the Redevelopment Property and/or discovered during implementation of the SI/SP. The CMS Report included remedial goals (RGs) for soil which were either the minimum residential soil RBTC or background concentrations. This Completion Report also presents the results of soil inspection, sampling, and removal activities that were conducted as part of the CMS Report.

The results of the SI/SP inspections/investigations and the activities conducted as part of the CMS Report will be used to determine if any mitigation/remediation measures are needed on the Redevelopment Property.

## 1.3 Report Organization

This Completion Report is divided into six sections as follows:

**Section 1.0 – Introduction:** provides an overview of the Site and Redevelopment Property and outlines the report organization.

**Section 2.0 – Site Overview:** presents an overview of the Site history and surrounding area and summarizes proposed land uses.

**Section 3.0 – Areas Recommended for Further Evaluation:** summarizes the areas recommended for further inspection/investigation as related to this Completion Report.

**Section 4.0 – Soil Inspection/Sampling Plan Implementation:** provides an overview of the sampling activities/methodology and describes in detail the inspections/investigations completed as part of this Completion Report.

**Section 5.0 – Conclusions:** summarizes inspections/investigations conducted and provides recommendations, if needed, for any follow-up actions.

**Section 6.0 – References:** includes all references cited in this report.

Supporting data are presented in the attachments to this report. Appendix A provides photographs of the areas inspected/sampled as part of this Completion Report. Appendices B through J, L, M, N, P, R, and S provide the laboratory analytical reports for the investigations discussed in this Completion Report. Appendices K, O, and Q contain waste manifests, truck logs, and Straight Bills of Lading associated with the off-haul of impacted sludge, liquids, and soil associated with the various removal actions conducted at the Redevelopment Property.

# 2.0 SITE OVERVIEW

## 2.1 Site History and Operations

The Site is located at 5600 Cottle Road in San Jose, Santa Clara County, California, and is approximately 321 acres in size. Prior to 1955, the Site was agricultural land, primarily tree orchards, with associated residences. In 1955, IBM purchased the Site. The Storage Technology Division of IBM owned and operated the Site from 1955 through 2002. IBM designed, developed, and manufactured computer storage devices, including hard disk drives, read/write heads, and disk storage media at the Site. On or about January 1, 2003, Hitachi GST, a new company formed as a result of a strategic combination of IBM and Hitachi's storage technology businesses, bought the Site.

As shown on Figure 1.3, approximately 30 buildings were present on the Site prior to commencement of redevelopment activities in August 2006. On-site buildings were used for a range of activities, including manufacturing, testing, assembly, research, development, wastewater treatment, reverse osmosis/deionized water (RO/DI) production, utilities, chemical storage, other storage, security, offices, and cafeteria. Exterior areas of the Site primarily consisted of landscaped areas, orchards, sidewalks, water fountains, asphalt parking lots, and paved private roads. As discussed below, Hitachi GST plans to continue industrial operations (developing and manufacturing of computer storage devices) on the Core Area.

Two electrical substations located in the central-southeastern portion of the Site provide electricity to the Site. One 115-kilovolt (kV) substation, which contains a 50 megawatt (MW) electrical generator, is owned and operated by Hitachi GST; the other 115-kV substation is owned and operated by Pacific Gas & Electric (PG&E). Facility personnel reported that electricity for the Site is provided by PG&E, and Hitachi GST's generator is only operated for testing, when there is a major Site power outage or when PG&E requests that Hitachi GST provide electrical back up during peak demand periods. As discussed below, both electrical substations will remain.

In the early 1980s, chlorinated hydrocarbons were detected in soil beneath an on-site underground tank farm. Site-wide investigations showed that volatile organic compounds (VOCs), primarily Freon 113, trichloroethene (TCE), 1,1,1-trichloroethane (TCA) and 1,1-dichloroethene (1,1-DCE) were present in groundwater beneath and downgradient of the Site. Subsequently, the Site has undergone extensive remedial action including the remediation of solvent-impacted soil and extraction and treatment of on-site and off-site groundwater. Under an order from the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB-SF) (Order No. R2-2002-0082 – Final Site Cleanup Requirements, as amended by Order No. R2-2007-0004), IBM is obligated to remediate the groundwater (RWQCB-SF 2002, 2007). According to Hitachi GST, on-site groundwater remedial actions are expected to continue for at least 10 years.

## 2.2 Surrounding Area

The Site is located in a mixed industrial, commercial and residential area near the intersections of Monterey Highway, Blossom Hill Road, and United States (US) Route 101, approximately seven

miles southeast of downtown San Jose. Figure 1.2 shows the immediate Site vicinity, which includes the following:

- Cottle Road is located to the west, with a shopping center, other commercial buildings, a hospital/medical center, and a medium-high density residential area beyond.

- IBM Building 025 (formerly part of the Site), which is still owned by IBM, is located to the northwest. This parcel is the proposed location of a future Lowe's Store.

- Parcel O-6 (formerly part of the Site) is located to the northeast. Hitachi GST transferred ownership of Parcel O-6, which is approximately 11 acres, to the City of San Jose in November 2005. The planned land use for this parcel is a future City of San Jose Police Substation.

- Southern Pacific Railroad and Caltrain right-of-way, the Blossom Hill Caltrain Station, and Monterey Highway are located to the north, with medium to medium-low density residential, a commercial shopping area, and US Route 101 beyond.

- Highway 85 and the Cottle Road Light Rail Station are located to the south, with a hospital/medical center, library, and single-family residential area beyond.

## 2.3 Future Land Use

As previously discussed, Hitachi GST has moved its R&D and administrative office operations to a different location in San Jose (3403 Yerba Buena Road). In turn, most of the R&D and administrative office buildings at the Site (Buildings 010, 012, 018, 026, 028, 028J, and 051) have been demolished. Two buildings, Buildings 009 (office) and 011 (cafeteria), on the Redevelopment Property are considered historically significant and will remain intact.

The Redevelopment Property, which covers approximately 143 acres, has been divided into five "outer" parcels (Parcels O-1 through O-5) and includes Endicott Boulevard/Tucson Way, as shown on Figure 1.4. Following building demolition, rough grading and main utility/roadway installation by Hitachi GST, Parcels O-1 through O-5 will be sold and redeveloped into a mixed residential, commercial, and recreational open space area. In addition, Hitachi GST will be transferring ownership of Endicott Boulevard/Tucson Way and newly constructed public roadways on Parcels O-1 through O-5 to the City of San Jose. Prior to property transfer, Hitachi GST is working with DTSC to remove the Redevelopment Property from the RCRA Permit.

Hitachi GST plans to continue industrial operations (developing and manufacturing of computer storage devices) on the Core Area. The Core Area contains all of the current manufacturing, chemical storage, waste storage, and wastewater treatment buildings/areas on the Site. All activities previously located on Parcels O-1 through O-5 have been moved to the Core Area under the redevelopment plan. There are no current RCRA-permitted sources in the Redevelopment Property. The existing PG&E substation will remain.

# 3.0 AREAS RECOMMENDED FOR FURTHER EVALUATION

## 3.1 History

The following history for each of the "other remaining areas" was taken from the Screening HHRA and the CCR. In addition, ENVIRON conducted Site visits as part the Phase I Environmental Site Assessments (ESAs) prepared by ENVIRON in 2003 and 2004. All areas identified below for inspection/investigation are shown on Figure 3.1. No "other remaining areas" were identified in the CCR or SI/SP for Parcels O-1 or O-3.

### 3.1.1 Parcel O-2

Other remaining areas identified in Parcel O-2 included a former emergency generator at Building 010, several areas in the former Building 026, and a possible former buried fuel pipeline, as discussed below.

Emergency Generator at Building 010

A soil investigation was conducted by Harding Lawson Associates (HLA) in December 1988 through February 1989 adjacent to the diesel fuel emergency generator associated with Building 010. According to the soil investigation report, IBM personnel noticed staining on the concrete pad beneath the generator. This investigation was conducted to evaluate whether diesel fuel may have migrated through the concrete and into the underlying soil.

On December 15, 1988, a boring was advanced to a total depth of nine feet below the concrete surface, and four soil samples were collected at different depths and analyzed for total petroleum hydrocarbons as diesel (TPH-diesel). TPH-diesel was detected in all four samples ranging from 190 to 220 milligrams per kilogram (mg/kg). Based on these results, on February 3, 1989, four additional soil borings were advanced in this area and soil samples were collected. TPH-diesel was not detected (<10 mg/kg) in any of these samples. Additional borings were attempted on the northern side of the Building 010 generator; however, the borings could not be advanced because polyvinyl chloride (PVC) pipes were encountered directly beneath the concrete pad.

According to the soil investigation report, a strong diesel odor was noticed below the core holes where these borings were attempted. Based on these results, HLA recommended that the soil beneath the Building 010 emergency generator concrete pad be excavated to a depth of 10 feet, and confirmatory soil samples be collected from the walls and floor of the excavation to confirm that soil concentrations of diesel fuel are below 10 mg/kg. No information was found in the documentation received to confirm that the excavation and confirmation sampling was conducted.

Former Waste Vault 15 at Building 026

Waste Vault (WV) 15 consisted of a large enclosed area on the western side of Building 026, comprising five sections: 1) a waste mixed solvent storage area containing one 250-gallon aboveground storage tank (AST) (T-1) and a sump; 2) a diesel generator; 3) a DI water area containing a 10,000-gallon DI water tank (T-6) and twelve smaller dionized (DI)

water storage tanks; 4) a waste treatment area containing a 1,200-gallon hydrofluoric (HF) acid neutralization tank (P-1); and 5) an industrial waste storage area containing four aboveground 2,000-gallon fiberglass reinforced plastic (FRP) tanks (T-2, T-3, T-4, and T-5) for the collection of concentrated and diluted heavy metal and brine industrial waste. Tank P-1 within WV-15 was formerly a permitted RCRA unit. (It is unknown whether the other tanks within WV-15 were formerly permitted RCRA units). Solvent wastes were formerly collected and transferred off-site. Brine and heavy metal waste streams were formerly transferred via underground pipelines within concrete trenches to the on-site wastewater treatment plant (Building 110) on the Core Area.

In September 1985, a soil investigation was conducted to evaluate whether chemicals had migrated into soils beneath the concrete vault associated with the HF acid neutralization tank (P-1) within WV-15. Soil samples from three soil borings up to 12 feet below ground surface (bgs) were analyzed for pH, fluoride, and total chromium. Sampling results indicated that pH ranged from 6.0 to 7.0; fluoride ranged from 0.2 to 0.4 mg/kg; and total chromium ranged from 49 to 77 mg/kg. Based on these concentrations, HLA concluded that these chemicals had not migrated into underlying soils.

HF acid wastewater was formerly collected in tank P-1 in WV-15 and neutralized under IBM's RCRA Permit. As a result of a Department of Health Services (DHS) inspection of the IBM facility on July 27, 1989, DHS identified several hazardous waste violations at the facility, including the improper notification and closure of tank P-1. On January 29, 1990, the DHS and IBM signed a Corrective Action Order and Complaint for Penalty (Docket HWCA 89/90-029), which ordered IBM to submit a certification that the HF acid neutralization tank was closed in accordance with the approved Closure Plan associated with the Site's RCRA Permit. IBM submitted a "Waste Hydrofluoric Acid Storage Tank Closure Report" prepared by International Technology Corporation (IT) dated March 5, 1990 to the DHS. The closure report indicated that tank P-1 was properly closed in April/May 1988.

In July 1988, a soil investigation was conducted beneath the tank P-1 vault. Two cores were drilled through the floor of the concrete vault that contained Tank P-1, one at the fill end of the tank and the other beneath the vault sump. Two soil samples, designated as IBM-1 and IBM-2, were collected from native soils and analyzed for pH, fluoride, and metals. The pH of the two samples was 8.0 and 8.1. Concentrations of three metals (copper, lead, and nickel) exceeded the Soluble Threshold Limit Concentration (STLC). None of the metal concentrations exceeded the Total Threshold Limit Concentration (TTLC).[1] Chromium was detected up to 46 mg/kg; copper was detected up to 36 mg/kg; lead was detected up to 11 mg/kg; and nickel was detected up to 88 mg/kg. The closure report indicates that no further action was required. Based on IBM's submittals, the DHS stated in a letter dated July 30, 1990, that the HF acid tank is officially closed.

Pursuant to IBM's Closure Plan associated with the Site's RCRA Permit, tanks T-1, T-2, T-3, and T-4 were closed in August 1993 and tank T-5 was closed in February 1994. According to the closure reports dated August 1993 and February 1994, respectively, all five

[1] Neither of the soil samples exceeded ten times the STLC for copper, lead, or nickel; therefore, no Waste Extraction Tests (WETs) were conducted.

tanks were drained, cleaned, and properly disposed. No soil sampling was conducted as part of closure activities. Hitachi GST personnel were unaware of when tank T-6 (DI water tank) was removed. Hitachi GST personnel reported that all tanks, sumps, and associated piping have been removed from WV-15.

Former Chemical Storage Room at Building 026

An investigation of soil conditions beneath Building 026 was conducted in July 1987. The investigation was performed in Rooms 103, 104, 105, 106, 110, 112, 402, 403, 404, 405, and the Chemical Storage Room. These rooms were part of pilot-scale product development and were used for several purposes, including plating, soldering, etching, and chemical storage. This investigation was conducted to evaluate whether chemicals used in the rooms had migrated through the concrete floor into the underlying soils. Initially nineteen soil borings were drilled inside Building 026 and one boring was drilled outside at the southeastern corner of the building as a background location. Two soil samples were collected from most borings. All samples were from fill or from pipe trench backfill beneath the building. The first sample from each boring was collected directly beneath the concrete slab, which ranged from six to 12 inches thick. A second sample was collected from two to four feet below the concrete slab. The shallow sample from each boring was analyzed and the lower sample was held for possible analysis at a later date. The samples were analyzed for different constituents, including TCE, Freon 113, TCA, n-methyl-2-pyrrolidone (NMP), chromium, copper, nickel, lead, arsenic, tin, fluoride, nitrate, sulfate, chloride, and pH.

Chromium was detected up to 240 mg/kg; lead was detected up to 95 mg/kg; and nickel was detected up to 270 mg/kg. In addition, TCE was detected at 15 micrograms per kilogram (μg/kg) and at 50 μg/kg in two borings located in the Chemical Storage Room. Therefore, the deeper sample from each of these two borings was analyzed for TCE, although the holding time for analysis had been exceeded. TCE was detected at 200 μg/kg in one of the deeper samples and was not detected (<10 μg/kg) in the other deeper sample. Due to the elevated detections of TCE in the Chemical Storage Room, six additional borings were advanced in the Chemical Storage Room and loading dock area in September and October 1987. Soil samples were collected and analyzed for TCE and pH. TCE was detected in four of the samples up to 230 μg/kg.

HLA recommended excavation of any TCE-containing soils (above 500 μg/kg) within the Chemical Storage Room. HLA estimated that up to 23 cubic yards of soil should be removed from the trench backfill beneath the Chemical Storage Room on either side of the cast iron pipe that was formerly used to transfer wastewater to WV-02 (original) and WV-02 (second). ENVIRON was not provided with information that any soil had been remediated in the Chemical Storage Room.

Liquid Seepage in Room 400

A soil investigation was conducted in February 1987 in Room 400 of Building 026. According to the soil investigation report, liquid had periodically migrated upward through the concrete floor and accumulated between the linoleum and concrete in this room for several years. This investigation was conducted to evaluate the possible source areas of the liquid observed on the floor in Room 400 and to evaluate whether the liquid contained

organic chemicals. At the time of the investigation, the room had been abandoned. According to the soil investigation report, the liquid appeared to be mostly oil.

On February 19, 1987, eight borings, which were randomly spaced throughout the room, were drilled through the concrete floor to a maximum depth of 2.5 feet. Three samples (one from concrete and two from fill material) were collected from each boring and analyzed for TCE, Freon 113, TCA, tetrachloroethene (PCE), total chromium, hexavalent chromium, copper, nickel, fluoride, nitrate and pH. TCE was detected in three samples at a depth of 0.5 feet bgs up to 7.0 μg/kg. TCE was not detected (<1 μg/kg) in the remaining samples. Freon 113, TCA, and PCE were not detected (<1 μg/kg) in any of the samples. Chromium was detected up to 60 mg/kg; copper was detected up to 140 mg/kg; and nickel was detected up to 130 mg/kg. Hexavalent chromium was not detected (<1 mg/kg) in any of the samples. Fluoride was also not detected (<2 mg/kg) in any of the samples. Nitrate was detected up to 20 mg/kg, and pH ranged from 7.3 to 13.0.

According to the soil investigation report, these results do not indicate a source area for the observed surface liquid seeps, and HLA concluded that additional soil sampling was not necessary at that time. The soil investigation report does recommend that when the linoleum in the room is removed, the concrete floor be inspected for loss of integrity, including cracking, crumbling, staining, and possible routes for liquid migration.

Possible Former Buried Pipeline

One soil investigation was conducted north of Building 026; however, IBM and their environmental consultant (MACTEC) personnel were unsure why this soil investigation was conducted. Based on the locations of the soil borings, it appears that this investigation was conducted as part of a pipeline removal. At least sixteen soil borings were advanced. A soil investigation report for these soil borings has not been located in IBM or MACTEC files.

### 3.1.2 Parcel O-4

Other remaining areas identified in Parcel O-4 included a former industrial wastewater sump at Building 028, as discussed below.

Former Industrial Wastewater Sump at Building 028. Industrial wastewater from various laboratories was previously collected in a sump in the basement of Building 028. Wastes from the sump were pumped overhead to a pipeline leading to the on-site wastewater treatment plant (Building 110) on the Core Area. The sump does not appear to be a current or former RCRA permitted unit. No reports are available documenting completion of soil investigation beneath the sump. The sump appears to have been abandoned in-place by filling with concrete.

### 3.1.3 Parcel O-5

Other remaining areas identified in Parcel O-5 included a former waste vault and associated pipeline at Building 051, as discussed below.

WV-11 and Associated Pipeline at Building 051. Blow down from the Building 051 cooling tower was formerly collected in a tank (WV-11) and discharged to the on-site wastewater treatment plant (Building 110) in the Core Area. According to Hitachi GST personnel, WV-11 was a former RCRA-permitted unit. In 1994, the piping from WV-11 to Building 110 was closed consistent with IBM's Closure Plan and WV-11 was connected to the municipal sanitary sewer. Notification of this pipeline closure was submitted to the DTSC in a letter from IBM dated September 26, 1994.

### 3.2 Recommendations for Additional Inspection/Investigation

The following additional inspections/investigations were identified for "other remaining areas" in the SI/SP:

Parcel O-2

- A limited number of soil samples should be collected in the area beneath the Building 010 emergency generator concrete pad to confirm that any residual diesel fuel concentrations are below RBTCs developed for the Redevelopment Property.

- After Building 026 demolition, an environmental engineer should inspect the former waste mixed solvent storage area within former WV-15, which contained one 250-gallon AST (tank T-1). If any indications of leaking are present (odors, visual staining), soil sampling should be conducted.

- Sampling for VOCs, total chromium, nickel, and possibly other metals beneath the former Chemical Storage Room in the vicinity of the cast iron pipe.

- HLA previously recommended that when the linoleum in Room 400 of Building 026 is removed, the concrete floor be inspected for loss of integrity, including cracking, crumbling, staining, and possible routes for liquid migration. ENVIRON recommends that this inspection be performed. If any indications of leaking are present (odors, visual staining), soil sampling should be conducted.

- Because the location of the possible former buried pipeline located north of Building 026 is unknown, collecting confirmatory soil samples in the vicinity of the possible former buried pipeline is not possible. Therefore, ENVIRON recommends that if any indications of a historic release (visual staining, odor) are identified during Site redevelopment/grading activities, soil sampling should be conducted.

The following recommendation was also included in Attachment VIII of the SI/SP Report: An out-of-use buried concrete trench, that formerly contained pipes which were connected to former waste vaults and tanks, is located west of Building 026 and runs in a north-south direction along the entire length of Parcel O-2. Given the history of this trench, ENVIRON recommends that an environmental engineer should inspect the area surrounding the concrete trench after it is removed as part of redevelopment activities. If any indications of leaking are present (cracking, visual

staining), soil sampling should be conducted. This recommendation was addressed in the Completion Report for Attachment III of the SI/SP.

Parcel O-4

- A former industrial wastewater sump is located in the basement of Building 028 and has since been filled with concrete and is no longer in use. Once removed, an environmental engineer should inspect the area surrounding the sump in building 028. If any indications of leaking are present (visual staining, odor), soil sampling should be conducted.

Parcel O-5

- An environmental engineer should inspect the Building 051 Cooling Tower area, including formerly designated WV-11 and former associated pipeline areas during demolition activities. If any indications of leaking are present (cracking, visual staining), soil sampling should be conducted.

## 3.3 Areas Identified During Implementation of the CMS Report

The CMS Report was prepared to address the presence of potential contamination in soil that may have been encountered during building demolition and/or earthwork activities within the Redevelopment Property and/or discovered during implementation of the SI/SP. In accordance with the CMS Report, a representative from ENVIRON was on-site to oversee the redevelopment activities. Photographs of areas inspected are provided in Appendix A. Redevelopment activities (including building demolition, and earthwork activities such as grading, utility removal/installation and roadway demolition/construction) were performed by California certified contractors. During the course of redevelopment activities, several areas were identified by ENVIRON as requiring additional sampling and, in some cases, soil removal in accordance with the CMS Report. The discovery of each of these additional areas and the recommended action is described below. All areas identified below for inspection/investigation are shown on Figure 3.2.

### 3.3.1 Parcel O-1

Previously Unknown Well in Boulder Boulevard

During grading activities for the new road construction, a previously unknown well was found on Parcel O-1. The well was found by DeSilva Gates Construction (DeSilva Gates), the contractor performing the new road construction within the Redevelopment Property. The well was found on January 9, 2007, approximately one to two feet beneath the asphalt and roadbase material of Boulder Boulevard near Concord Drive (see Figure 3.2). The well was approximately three feet in diameter and appeared to be of a brick-lined construction. Soil was visible in the well, approximately 10 feet from the top of the well construction. It is unknown if this soil had been placed (or had fallen) inside the well or if the soil denoted the total depth of the well. No liquid was observed inside the well. Photographs of the previously unknown well are provided in Appendix A, Photos 1 through 3.

Hitachi GST was aware that potential unknown wells existed in this area. As part of ground water investigations conducted by IBM on the Site in the 1980s, a well survey was

conducted to locate old wells (e.g., irrigation wells for former orchards) that could serve as conduits. Based on the findings of the well survey, a number of potential old wells were identified, including three wells in the vicinity of this unknown well that was recently discovered. At the time of the well survey, the status of all three of these wells was "unknown" (i.e., wells not previously known to exist or borings whose approximate locations are known, but may now be covered; unknown status wells may or may not have been properly destroyed).

Based upon the unknown status of the well, ENVIRON recommended collecting a sample of the soil observed inside the well.

### 3.3.2 Parcel O-2

Building 026 Clarifier

After Building 026 was demolished and the concrete floor slab was removed, Ferma Corporation (Ferma), the contractor performing the demolition activities, began removing utilities underneath and surrounding the former Building 026 footprint. During the utility removal, Ferma found a previously unidentified manhole in the former landscaping area immediately to the west of Building 026, approximately 148 feet from the former northwest corner of the building (refer to Figure 3.2 for the clarifier location). Ferma opened the manhole cover and discovered the manhole provided access to a concrete vault. The exact dimensions of the vault could not be determined at the time; however, liquid was observed at the bottom of the vault. A later review of historical documents provided by IBM indicated that the vault may have been a clarifier used at Building 026, prior to installation of the industrial wastewater treatment system in the early 1970s. The vault, herein after referred to as "the clarifier", had not been shown on any previous building plans reviewed by ENVIRON. Photographs of the Building 026 clarifier are provided in Appendix A, Photos 14 through 17.

On October 19, 2006, ENVIRON collected a sample of the liquid observed inside the clarifier (026-Vault-GW), using a disposable polyethylene bailer. It was noted that sludge was present at the bottom of the clarifier; however, the amount of sludge could not be determined at the time. In addition, a sample of the sludge could not be obtained. The sample of the liquid was submitted to Severn Trent Laboratory (STL) of Pleasanton, California for analysis of VOCs by United States Environmental Protection Agency (USEPA) Method 8260B and TPH diesel and motor oil by USEPA Method 8015B. The laboratory analytical report in included in Appendix B.

Chlorinated solvents were detected in the liquid including TCE, cis-1,1-DCE, and trans-1,2-DCE at concentrations of 220, 600, and 140 micrograms per liter (µg/L), respectively. Elevated levels of diesel-range organics were also detected in the liquid. Based upon the results of this sample, ENVIRON recommended that the liquid and sludge inside the clarifier be pumped out and disposed off-site. ENVIRON further recommended that the inside of the clarifier be steam-cleaned before removal of the clarifier from the ground and that soil sampling of the clarifier grave be conducted to confirm that the clarifier did not leak.

### 3.3.3 Parcel O-3

Black Soil in Parking Lot South of Building 026

During the removal of an abandoned clay pipeline underneath the parking lot area south of Building 026, an area of black soil was observed underneath the asphalt and roadbase material. A photograph of the black soil is provided in Appendix A, Photo 18. The black soil had a slight organic odor and appeared to be associated with the abandoned pipeline. The soil was screened in the field using a photoionization detector (PID) and pH paper. PID readings were not detected and pH screening of the soil indicated the soil pH was within the neutral range. However, because of the noted discoloration of the soil, ENVIRON recommended collecting a sample of the soil.

### 3.3.4 Parcel O-4

Building 018 Pipe Backfill

During utility removal surrounding Building 018, a fine-grained, black material was observed around underground pipes on the west side of the building. Discussions with Hitachi GST facility personnel indicated this black material may have been a black spray foam that was used as insulation on water pipes associated with the heating and cooling system that ran from Building 018 to buildings formerly located west and south of the building (these buildings housed eleven overnight guest rooms termed "the bungalows" and were described in the Phase I ESA prepared by ENVIRON in 2003). The bungalows were built in the late 1950s and demolished around 1990. No further information could be obtained regarding the black spray foam insulation material. Photographs of the Building 018 pipe backfill area are provided in Appendix A, Photos 19 through 22.

On January 22, 2007, a grab sample of the black pipe-backfill material was collected (B018-PIPEBACKFILL) and analyzed for TPH diesel and motor oil by USEPA Method 8015B, CAM 17 Metals by 6010B and 7470/7471, pH by USEPA Method 9045, semi-volatile organic compounds (SVOCs) by USEPA Method 8270, and polychlorinated biphenyls (PCBs) by USEPA Method 8080. A copy of the laboratory analytical report is included as Appendix C. TPH diesel was detected in the sample at a concentration of 2,900 mg/kg, below the residential soil RG of 5,200 mg/kg. TPH motor oil was detected at a concentration of 6,900 mg/kg, above the residential soil RG of 2,300 mg/kg. Low levels of metals were detected, but at concentrations below the RGs. The pH result was 7.93, close to neutral. SVOCs and PCBs were not detected above the laboratory reporting limits. Based upon the detection of TPH motor oil at a concentration above the residential soil RG, ENVIRON recommended excavation of the black pipe-backfill material for off-site disposal and collection of confirmation soil samples of the excavation sidewalls and bottom.

Building 018 Vault

During utility removal surrounding Building 018, a manhole cover with the label "Fuel Vault" was discovered. Ferma opened the manhole cover and found the manhole provided access to a small concrete vault. Liquid was observed inside the vault. Photographs of the Building 018 vault are provided in Appendix A, Photos 23 and 24. On April 9, 2007, a sample of this liquid was collected using a disposable polyethylene bailer and submitted for analysis of VOCs by USEPA Method 8260B and TPH diesel and motor oil by USEPA

Method 8015B. The laboratory analytical report is included as Appendix D. The results of this sample indicated that TPH diesel was present in the liquid at a concentration of 84 μg/L. VOCs were not detected above the laboratory reporting limits. Based upon the presence of TPH in the liquid, ENVIRON recommended the liquid be pumped out before the vault was removed and soils beneath the vault be inspected for evidence of a release (visual staining, odor) following the removal of the vault.

### 3.3.5 Parcel O-5

Black Soil in Raleigh Road

During the demolition activities of Raleigh Road, an area of black soil was observed underneath the asphalt and roadbase material. A photograph of the black soil is provided in Appendix A, Photo 28. The black soil had no odor and no subsurface utilities were observed in the area of the black soil. The soil was screened in the field using a PID and pH paper. PID readings were not detected and pH screening of the soil indicated the soil pH was within the neutral range. However, because of the noted discoloration of the soil, ENVIRON recommended collecting a sample of the soil.

Building 051 Industrial Waste Line

During utility removal surrounding Building 051, a manhole cover with the label "Industrial Waste Line – PVC Abandoned in Place" was discovered. Ferma opened the manhole cover and liquid was observed inside the manhole. Photographs of this area are provided in Appendix A, Photos 29 and 30. On March 28, 2007, a sample of this liquid was collected using a disposable polyethylene bailer and submitted for analysis of VOCs by USEPA Method 8260B, TPH diesel and motor oil by USEPA Method 8015B, and CAM 17 Metals by 6010B and 7470/7471. The laboratory analytical report is included as Appendix E. The results of this sample indicated that TPH diesel was present in the liquid at a concentration of 54 μg/L. VOCs were not detected above the laboratory reporting limits. Based upon the presence of TPH in the liquid, ENVIRON recommended the liquid be pumped out before the manhole and associated piping was removed and soils beneath the manhole and pipes be inspected for evidence of a release (visual staining, odor) following removal.

Black Soil in Building 051 Parking Lot

During the demolition activities of the parking lot area east of Building 051, an area of black soil was observed underneath the asphalt and roadbase material. The black material had a slight organic odor and no subsurface utilities were observed in the area of black soil. The soil was screened in the field using a PID. PID readings were not detected. However, because of the noted discoloration of the soil, ENVIRON recommended collecting a grab sample of the soil. Although a photograph of the black material was not taken, a photograph showing the general soil conditions beneath the former Building 051 parking lot is provided in Appendix A, Photo 31.

# 4.0 SOIL INSPECTION/SAMPLING PLAN IMPLEMENTATION

As described above, several remaining areas were identified on the Redevelopment Property as requiring additional inspection and/or sampling as part of the SI/SP. In addition, throughout the course of the demolition activities within the Redevelopment Property, several areas were identified as requiring additional inspection, sampling, and/or removal in accordance with the CMS Report. Photographs of these other remaining areas are provided in Appendix A. The general sampling methodologies, described in Section 4.1, were conducted in accordance with either Appendix A of the SI/SP Report or the procedures outlined in the CMS Report, as appropriate. The results of the inspection, sampling, and removal activities are presented in Section 4.2 through 4.5 and are organized by Parcel. A summary of the soil samples collected as part of the SI/SP Attachment VIII Completion Report is provided in Table 4.1.

## 4.1 General Sampling Methodology

Soil and soil gas samples were collected from various locations across the Site in accordance with Attachment VIII of the SI/SP. In addition, there were areas where the evidence of odorous or discolored soils prompted the collection of a grab sample and/or the removal of the material off-site. The collection of the grab samples and the collection of confirmation samples following removal actions were conducted in accordance with the CMS Report. All work was supervised by a California Registered Professional Engineer. ENVIRON personnel were present during all sampling activities to obtain samples of subsurface materials, make observations of work area conditions, conduct health and safety monitoring of organic vapors during temporary probe installation, and provide technical assistance as required.

### 4.1.1 Soil Sampling Methodology

Soil samples were collected in accordance with Appendix A of the SI/SP. Grab samples were collected using a hand-hammered ARTS-brand sampling device. Drilling was performed using either a Geoprobe™ or Vibra-push direct-push drilling rig. Samples were collected in either stainless steel or acetate sleeves, capped with Teflon™-lined caps, placed in Ziploc™-type plastic bags, and stored on ice in a cooler. Samples were submitted to STL, a California State-certified analytical laboratory, under chain of custody (COC) protocol.

Soil samples requiring analysis of volatile compounds were collected from the sample tube in three separate, 5-gram samples using the EnCore® sampling system. The EnCore® sampling system consists of a T-Handle sampler holder, a Teflon® sampler cartridge, and a sample cap. To collect an EnCore® sample, the EnCore® sample cartridge was loaded in the T-handle and driven by hand into the sampling tube. The EnCore® sample cartridge was then removed from the T-handle, checked to ensure that it has been completely filled, capped with the EnCore® sample cap, and placed in a resealable Mylar bag. The three EnCore® samples, constituting a single sample, were then placed in the same sealable sample bag and stored immediately on ice in a closed container for delivery to the laboratory under standard COC protocols.

During drilling, soils contained in the sample tube were visually inspected for signs of contamination. Soil collected during drilling and/or collected as grab samples were placed in sealable plastic bags and allowed to equilibrate. After approximately five minutes, a PID probe was inserted into the bag to measure total organic vapors (headspace analysis). The headspace reading was recorded on the boring log. Background organic vapor concentrations were also measured and recorded. The PID equipment was calibrated according to the manufacturer's instructions prior to use each day of sampling.

During sampling and logging of the soil samples, the field geologist or engineer would:

- Check the orientation of the sample.
- Record the time of sampling.
- Observe and record sample recovery.
- Observe the soil type(s) and evidence of potential contamination, including staining, odor, and artificial debris.
- Label the samples, including the sample number (boring/well number and depth interval in feet bgs), project number, date sampled, and sampler's name.
- Place Teflon liners on ends of tubes and caps; immediately seal and store the two lowermost tubes for possible chemical analysis; use upper tube for organic vapor measurements and for logging and additional field measurements.
- Log and record the soil type(s) according to the Unified Soil Classification System (USCS).
- Conduct organic vapor measurements on samples according to the procedure described above.

Investigation derived waste (IDW), when generated, was collected in 55-gallon drums that were labeled and sealed following completion of field activities. Management and disposal of IDW was the responsibility of Hitachi GST. ENVIRON provided Hitachi GST with the relevant analytical results to assist with appropriate management and disposal of IDW.

### 4.1.2 Soil Gas Sampling Methodology

In accordance with the SI/SP, soil gas samples were collected using a Geoprobe™-type direct push drilling rig. Soil gas samples were collected in general conformance with the DTSC *Advisory on Active Soil Gas Investigations*, dated January 28, 2003 (the "DTSC Advisory") (DTSC 2003).

At each sampling location, soil gas samples were collected from the desired depth via temporary probes. The temporary soil gas probes were constructed of 1-inch outer diameter chrom-moly steel with an inert 1/8-inch diameter nylaflow tube that ran down the center of the probe to sampling ports beneath the tip. The temporary probe was driven into the ground with an electric rotary hammer or similar apparatus. Once the desired depth was reached, the probe was retracted slightly, which opened the tip and exposed the vapor sampling port. Following equilibration, soil gas was withdrawn from the nylaflow tubing using a small calibrated syringe connected via a shut-off valve. The first three dead volumes

of vapor were discarded to purge the sample tubing. After the sample tubing was purged, a flow regulator was connected to the shut-off valve in series with a one-liter Summa™ canister. The shut-off valve was opened and the soil gas samples were collected in the one-liter Summa™ canisters. Per the DTSC Advisory, the flow rate for purging and sampling was not allowed to exceed 200 milliliters per minute (mL/min). At the completion of the sampling event, all of the canisters were shipped to an off-site laboratory for analysis using USEPA Method TO-14.

Each temporary soil gas probe was sealed as described in the DTSC Advisory. During installation of the probe, hydrated bentonite was used to seal around the drive rod at ground surface, and the inner soil gas pathway from probe tip to the surface was sealed via an adapter fitted with an o-ring and connected to the probe tip. Leak tests were conducted using 1,1-difluoroethane gas that was sprayed during sampling.

A COC form was completed to maintain the custodial integrity of each soil gas sample. A minimum of one tripblank was collected to detect any possible interference from ambient air introduced in the field or during sample shipping. Laboratory control samples and dilution procedure duplicates were conducted in accordance with the DTSC Advisory (Section 2.7.1C). In addition, a purge volume test at a minimum of one location near potential contaminant sources and a probe leak test were conducted each sampling day as described in Section 2.3 and 2.4 of the DTSC Advisory. Probe installation times, sample collections times, purge volume times and other pertinent data were recorded in the field for eventual inclusion in the report.

To minimize the potential for cross-contamination between sample locations, all external probe parts were cleaned and decontaminated before insertion. The internal nylaflow tubing and calibrated syringes were replaced prior to insertion at new sampling locations.

### 4.1.3 Excavation Confirmation Sampling Methodology

In accordance with the CMS Report, confirmation samples were collected from in-place soils at the limits of the excavation as follows:

- Sidewall samples were collected from freshly exposed soil approximately one-half of the excavation depth at an interval of approximately one sample per 100 to 150 linear feet of sidewall excavation face. A single sidewall confirmation sample consisted of four discrete samples that were collected in stainless steel liners and composited in the laboratory to result in a single composite analysis.

- If a sidewall face was less than 50 linear feet, a discrete sample was collected. The discrete sidewall samples were collected from freshly exposed soil approximately one-half of the excavation depth.

- Bottom confirmation samples were collected from excavation bottoms at discrete locations on approximately 50-foot centers for areas greater than approximately 2,500 square feet. For areas smaller than 2,500 square feet, one bottom sample was collected

from the approximate center of the excavation. Excavation bottom samples were not composited.

- A minimum of one bottom sample and one sidewall sample per excavation face was collected from each excavation.

Samples were submitted to the laboratory for analysis prior to excavation.

### 4.1.4 Data Evaluation

Soil results were compared to residential soil RGs as defined in the CMS for the Redevelopment Property. Detected chemicals with no residential soil RG were compared to residential soil RBTCs developed as part of the CCR. For chemicals not detected during previous Site investigations, a residential soil RBTC was developed using the exposure assumptions and methodology described in the CCR. Soil gas results were compared to residential soil gas RBTCs; assuming vapor migration into a building.

## 4.2 Parcel O-1

Areas in Parcel O-1 discovered as part of the CMS included the previously unknown well in Boulder Boulevard. Photographs of the previous unknown well are provided in Appendix A, Photos 1 through 3. On January 25, 2007, Precision Sampling, Inc. (Precision) of Richmond, California mobilized to the Site and collected a shallow sample from the top six inches of soil inside the previously unknown well found beneath the former Boulder Boulevard using a GeoProbe direct-push rig. The sample (identified as sample OLDWELL-S1) was submitted for analysis of VOCs by USEPA Method 8260B, TPH diesel and motor oil by USEPA Method 8015B, CAM 17 metals by USEPA Method 6010B and 7470/7471, and pH by USEPA Method 9045.

The soil sample results are summarized in Table 4.2. The laboratory analytical report is included in Appendix F. VOCs and TPH were not detected in the soil. Metals were detected at levels below the residential soil RGs developed for the Redevelopment Property. The pH result was 7.36, which is within the range for naturally occurring soils.

Hitachi GST contacted the Santa Clara Valley Water District (SCVWD) regarding closure of the previously unknown well. According to the SCVWD, the well structure was believed to be a "pit-privy" or early septic system. Most of these "pit-privies" are very shallow, to the point that the SCVWD does not deem them as a potential threat to groundwater resources. The SCVWD indicated that no permits were required with their office to close this well. Subsequently, the well was backfilled and compacted to meet Site requirements (90% compaction) following standard procedures for the Site.

## 4.3 Parcel O-2

Other remaining areas identified in Parcel O-2 included a former emergency generator at Building 010; WV-15, Room 400, and the former chemical storage room of Building 026; and a possible former buried fuel pipeline north of Building 026. Areas in Parcel O-2 discovered as part of the

CMS included a concrete clarifier found during the demolition activities associated with Building 026. These areas are discussed below.

### 4.3.1 Building 010 Emergency Generator

In accordance with Attachment VIII of the SI/SP, ENVIRON conducted soil sampling in the area of the B010 emergency generator on November 27, 2006. Drilling activities were completed by Precision using a track-mounted Vibra Push XD Series direct push drilling rig. Samples were collected from a total of four boring locations from each side of the former concrete pad which housed the emergency generator (identified as sample locations B010-B1, B010-B2, B010-B3, and B010-B4). Soil sample locations are shown on Figure 4.1. Samples were collected from each boring at five-foot intervals to a maximum depth of 20 feet bgs. Samples were submitted for analysis of TPH as diesel and motor oil by USEPA Method 8015B.

The sample results are summarized on Table 4.3. The laboratory analytical report is included in Appendix G. TPH diesel was detected in one sample collected from 4 feet bgs in boring B010-B2 at a concentration of 4.4 mg/kg, below the residential soil RG of 5,200 mg/kg. TPH constituents were not detected above their laboratory reporting limits in any of the other samples collected as part of this investigation.

### 4.3.2 Former Waste Vault 15 at Building 026

On September 13, 2006, an environmental engineer from ENVIRON was on-site to inspect the concrete slab of WV-15 following the removal of all of the equipment and tanks formerly located in the area. Photographs of the WV-15 slab are included in Appendix A, Photos 4 through 7. The concrete slab of the waste vault appeared in good condition and no major cracks or areas of staining of the concrete were observed.

Building 026 and the associated WV-15 were demolished in September through October 2006. An environmental engineer from ENVIRON was on-site to oversee the demolition activities. Following the concrete slab removal of WV-15, the soil immediately below the waste vault area was inspected by an environmental engineer from ENVIRON. A small area of black soil was observed beneath the former waste vault slab in the vicinity of the waste mixed solvent storage area that formerly contained one 250-gallon AST (Tank T-1). On October 19, 2006, a grab sample of this material (identified as sample WV-15-1) was collected and submitted for analysis of VOCs by USEPA Method 8260B, TPH diesel and motor oil by USEPA Method 8015B, CAM 17 Metals by USEPA Method 6010B and 7470/7471, and pH by USEPA Method 9045. The sample location is shown on Figure 4.2.

The results of the WV-15 sample are summarized on Table 4.4. The laboratory analytical report is included in the same report as the Building 026 clarifier liquid in Appendix B. Acetone, TPH diesel, and metals were detected in the soil sample, but at levels below the residential soil RGs developed for the Redevelopment Property. The pH result was 7.08, which is within the range for naturally occurring soils.

### 4.3.3 Former Chemical Storage Room Building 026

In accordance with Attachment VIII of the SI/SP, on October 17, 2006, ENVIRON conducted soil sampling in the area of the former cast iron pipe located below the Former Chemical Storage Room in Building 026. Drilling activities were completed by Precision using a track-mounted Vibra Push XD Series direct push drilling rig. Samples were collected from a total of three boring locations along the former pipe location (identified as sample locations B026-B1, B026-B2, and B026-B3). Soil sample locations are shown on Figure 4.2. Samples were collected from each boring at five-foot intervals to a maximum depth of 20 feet bgs. Samples were submitted for analysis of VOCs by USEPA Method 8260B, CAM 17 Metals by USEPA Method 6010B and 7470/7471, and hexavalent chromium by USEPA Method 7196.

Sampling results are summarized on Table 4.5. The laboratory analytical report is included in Appendix H. Low levels of TCE were detected in two samples collected from the top six inches of soil in borings B026-B1 and B026-B2. The detected concentrations (0.0051 mg/kg in boring B026-B1 and 0.0074 mg/kg in boring B026-B2) were below the residential soil RG for TCE of 0.019 mg/kg. Acetone was detected at a concentration of 0.095 mg/kg in the 4.5 foot bgs sample collected from boring B026-B3, below the residential soil RG of 200 mg/kg. There were no metals detected at levels exceeding the residential soil RGs. Hexavalent chromium was not detected above the reporting limit in any of the samples.

### 4.3.4 Room 400 Building 026

On September 19, 2006, an environmental engineer from ENVIRON was on-site to inspect the concrete floor slab of Building 026 in the vicinity of Room 400 following the removal of all of the furniture, equipment, and floor tiles formerly located in the area. Photographs of the Room 400 floor slab are included in Appendix A, Photos 8 through 13. Areas of dark staining of the concrete were visible during the time of inspection. Although no major cracks were noted in the floor slab, it was noted that screws had been drilled into the concrete slab throughout the room. These screws were used to support the elevated flooring system that had been installed in this room at some point in the past. As evident in the photographs, a dark material had been used to fill in gaps around the screws drilled into the concrete floor slab. It was unknown how far into the concrete floor slab these screws extended.

Building 026 was demolished in September through October 2006. An environmental engineer from ENVIRON was on-site to oversee the demolition activities. Following the concrete slab removal of Building 026, the soil immediately below the area of Room 400 was inspected by an environmental engineer from ENVIRON. A small area of black soil was observed beneath the floor slab adjacent to a concrete footing used to support the slab. On October 19, 2006, a grab sample of this material (identified as sample 026-400-1) was collected and submitted for analysis of VOCs by USEPA Method 8260B, TPH diesel and motor oil by USEPA Method 8015B, CAM 17 metals by USEPA Method 6010B and 7470/7471, and pH by USEPA Method 9045. The soil sample location is shown on Figure 4.2.

The results of this sample are summarized on Table 4.6. The laboratory analytical report is included in the same report as the Building 026 clarifier liquid in Appendix B. VOC constituents and TPH motor oil were not detected in the sample above the laboratory reporting limits. TPH diesel and metals were detected at levels below the residential soil RGs. The pH result was 10.3. The results of the soil sampling do not indicate a source area for the liquid seepage through the concrete floor that was observed in the past. A representative from ENVIRON was present throughout demolition of Building 026 and did not observe any indication as to what may have caused the historical liquid seepage.

Based upon the elevated pH results, ENVIRON conducted step-out sampling in the vicinity of the sample location 026-400-1 on November 9, 2006. Samples were collected by Transglobal Environmental Geochemistry (TEG) of Rancho Cordova, California using a Geoprobe™-type direct push drilling rig. Samples were collected from four locations (identified as sample locations 026-400-A through 026-400-D) located five feet to the north, east, south, and west of 026-400-1. Refer to Figure 4.2 for sample locations. Samples were collected from depths of one and two feet bgs and submitted for pH analysis via USEPA Method 9045. The laboratory analytical report is included in Appendix K. The pH results of the step-out samples ranged from 7.29 to 8.31; within the range of native soil conditions.

The elevated pH result in sample 026-400-1 could indicate a localized release of caustic material from Room 400; however, because the VOCs, TPH, and metals results are below the residential soil RGs and the results of additional step-out sampling indicate pH levels within the range of native soil conditions, no further action is recommended.

### 4.3.5 Building 026 Soil Gas Sampling

Following the collection of soil data at Building 026, ENVIRON worked with the DTSC to develop an appropriate soil gas sampling strategy at Building 026. On November 8 through 10, 2006, a representative from ENVIRON was on-site to oversee the collection of soil gas samples by TEG of Rancho Cordova, California. As shown on Figure 4.3, two approximately 25-foot grids were drawn surrounding former soil sampling locations at Building 026. One 75-foot by 150-foot grid (labeled A through D and 1 through 7, respectively) was created in the southwestern corner of former Building 026 in the vicinity of soil samples collected from the former chemical storage room, Room 400, WV-15, and WV-02 (second). One approximately 25-foot by 25-foot grid (labeled A through D) was created in the vicinity of former WV-02 (original).[2] In accordance with the sampling plan, soil gas samples were collected from 32 locations, at the nodes of the two grids (B026-A1 through B026-D7 and WV-02-A through WV-02-D). Samples were collected from each location at a depth of five feet bgs. In addition, while TEG was on-site, two soil gas samples were collected in the vicinity of the clarifier identified at Building 026. At the time of the soil gas sampling, the clarifier had not been removed from the ground. Soil gas samples were collected from one location (identified as B026-CLARIFIER-A) at five and 10 feet bgs.

[2] Soil sampling associated with WV-02 (original) and WV-02 (second) is included in the SI/SP Attachment III Completion Report.

The soil gas samples were collected in one-liter Summa™ canisters and shipped to Calscience Environmental Laboratories, Inc. (CEL) for analysis using USEPA Method TO-14. Two duplicate samples were collected during the sampling event. One tripblank sample was included in the shipping container and analyzed to detect any interference from ambient air. VOCs were not detected in the tripblank sample collected. With the exception of one sample (B026-CLARIFIER-A1), the leak check compound (1,1-difluoroethane) was not detected at or above the DTSC recommended leak check compound reporting limit of 10 µg/L of vapor. The five foot sample collected at the Building 026 clarifier (B026-CLARIFIER-A1) indicated that 1,1-difluoroethane was detected at a concentration of 27 µg/L.

The results of the soil gas sampling are shown in Table 4.7. The laboratory analytical reports are included in Appendix L. Compounds detected include benzene, bromomethane, carbon tetrachloride, chloroethane, chloroform, chloromethane, dichlorodifluoromethane, 1,1-dichloroethane (1,1-DCA), 1,1-DCE, cis-1,2-DCE, ethylbenzene, methylene chloride, o-xylene, m,p-xylene, PCE, toluene, TCE, trichlorofluoromethane (Freon 11), Freon 113, TCA, 1,3,5-trimethylbenzene, and 1,2,4-trimethylbenzene. Included in Table 4.7 are the residential soil gas RBTCs at five and 10 feet bgs. The results indicate that no VOCs were detected above residential soil gas RBTCs.

### 4.3.6 Possible Former Buried Pipeline North of Building 026

An environmental engineer from ENVIRON was on-site during demolition and redevelopment/grading activities in the vicinity of parking lot north of Building 026. There were no indications of a historic release from a possible buried pipeline (visual staining, odor) identified during demolition or redevelopment/grading activities.

### 4.3.7 Building 026 Clarifier

On January 11, 2007, DECON Environmental Services (DECON) mobilized to the Site to pump out, clean, and remove the clarifier found near Building 026. Photographs of the Building 026 clarifier are included in Appendix A, Photos 14 through 17. Prior to onset of these activities, DECON worked with Hitachi GST personnel to obtain the appropriate confined space entry permits required to enter the clarifier for cleaning purposes. DECON began operations by pumping out the liquid inside the clarifier using a vacuum truck. Approximately 250 gallons of liquid were removed from the clarifier and transported under appropriate waste manifest to Romic Environmental Technologies Inc. (Romic) for treatment and disposal. A copy of the waste manifest is included in Appendix K.

After the liquid was removed from the clarifier, DECON donned the appropriate personal protective equipment (PPE) and entered the clarifier. DECON removed the sludge observed at the bottom of the clarifier and placed it in 55-gallon drums that were located on the ground surface just outside the manhole entrance to the clarifier. The inside of the clarifier was pressure-washed and the liquid was drummed for characterization and off-site disposal by Hitachi GST. A copy of the laboratory analytical report for the clarifier sludge is included in Appendix L. A total of ten 55-gallon drums were filled with sludge and liquid for characterization and off-site disposal by Hitachi GST. The drums were transported off-

site under appropriate hazardous waste manifest to the Kettleman Hills Landfill, in Kettleman City, California. A copy of the waste manifest is included in Appendix K.

On January 15, 2007, DECON removed the soil from above and around the clarifier and placed this soil on visqueen sheeting. Once the clarifier was exposed, it was determined that the clarifier was approximately six feet long, four feet wide, and 10 feet deep. Three pipes, each approximately four inches in diameter, were observed emanating from the clarifier. One pipe was connected to the north side of the clarifier and two other pipes were observed heading out of the south side of the clarifier. The pipe runs were approximately six feet in length and had been cut and filled with grout. It is unknown as to who had cut and filled these pipes and when this event had occurred.

The concrete clarifier and pipes were removed from the ground and placed on visqueen sheeting adjacent to the excavation. The clarifier concrete and pipes were sent off-site as hazardous waste to the Kettleman Hills Landfill. A copy of the waste manifest is included in Appendix K.

Soil samples were collected from the bottom of the clarifier grave and from the bottom of the excavated pipe runs. Soil samples were also collected from the four sidewalls of the clarifier grave. Confirmation sample locations (026 CLARIFIER-A through 026 CLARIFIER-H) are shown on Figure 4.4. The excavation samples were submitted for analysis of VOCs by USEPA Method 8260B, TPH diesel and motor oil by USEPA Method 8015B, CAM 17 metals by USEPA Method 6010B and 7470/7471, and pH by USEPA Method 9045. A sample was also collected from the stockpile of the soil that had been removed from above and around the clarifier. This sample was also submitted to STL for the same analyses to determine if this soil could be reused on-site or if off-site disposal would be required.

The results of the confirmation soil samples are summarized in Table 4.8. The laboratory analytical reports are included in Appendix L. TCE was the only VOC detected in the soil. TCE was detected in the sample collected from the bottom of the excavation (identified as 026 Clarifier-H) at a concentration of 0.0071 mg/kg, which is below the residential soil RG of 0.019 mg/kg. VOCs were not detected in any of the other confirmation samples collected from the clarifier excavation. TPH diesel range organics were detected in five of the eight samples collected, with concentrations ranging from 2.3 to 41 mg/kg, below the residential soil RG of 5,200 mg/kg. TPH motor oil range organics were detected in one sample (026 Clarifier-E) at a concentration of 79 mg/kg, below the residential soil RG of 2,300 mg/kg. Metals were detected at levels below the residential soil RGs. The results of the pH analyses ranged from 8.30 to 9.08, which is within the range for naturally occurring soils.

The results of the excavation stockpile sample are summarized in Table 4.9. The laboratory analytical reports are included in Appendix L. In the stockpile soil, dichlorodifluoromethane (Freon 12) was detected at a concentration of 0.015 mg/kg, below the residential soil RBTC of 0.37 mg/kg. No other VOCs were detected in the stockpile soil. TPH diesel range organics were detected at a concentration of 4.4 mg/kg, below the residential soil RG of 5,200 mg/kg. Metals were detected at levels below the residential soil

RGs. The pH result was 8.35, which is within the range for naturally occurring soils. Since the stockpile results were below the residential soil RGs, the stockpile soil was not transported off-site and was used as backfill for the clarifier excavation.

## 4.4 Parcel O-3

Areas in Parcel O-3 discovered as part of the CMS included the black soil in the parking lot south of Building 026. A photograph of the black soil is provided in Appendix A, Photo 18. On October 12, 2006, a sample of the black material observed in the parking lot south of Building 026 was collected using a hand-hammered ARTS-brand sampling device. The sample was submitted for analysis of VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270, TPH diesel and motor oil by USEPA Method 8015B, CAM 17 Metals by USEPA Method 6010B and 7470/7471, and pH by USEPA Method 9045. The sample results are summarized in Table 4.10. The laboratory analytical report is included in Appendix M. Acetone was the only VOC constituent detected at a concentration of 0.055 mg/kg, below the residential soil RG of 200 mg/kg. Diethyl phthalate was the only SVOC constituent detected at a concentration of 0.17 mg/kg, below the residential soil RBTC of 49,000 mg/kg. TPH and metals were detected at levels below the residential soil RGs. The pH result was 7.12, which is within the range for naturally occurring soils.

## 4.5 Parcel O-4

Other remaining areas identified in Parcel O-4 included the former industrial wastewater sump at Building 028. Areas in Parcel O-4 discovered as part of the CMS included the Building 018 pipe backfill; and the Building 018 vault. These areas are discussed below.

### 4.5.1 Former Industrial Wastewater Sump at Building 028

Following the completion of demolition activities of Building 028, an environmental engineer from ENVIRON inspected the soils beneath the slab, including beneath the portion of the building where the Building 028 sump was believed to be located. There were no indications of a historic release (visual staining, odor) identified in the soil in the vicinity of the former Building 028 sump location.

### 4.5.2 Building 018 Pipe Backfill

On April 16 through April 23, 2007, Ferma excavated the black pipe-backfill material located west of Building 018. Photographs of this area are provided in Appendix A, Photos 19 through 22. Approximate extents of the excavation are shown on Figure 4.5. An environmental engineer from ENVIRON was on-site to observe the excavation activities. Excavation activities were conducted in accordance with the CMS. The excavation was deemed complete when visual evidence of the black pipe-backfill material no longer remained. Following the visual inspection, confirmation samples of the excavation sidewalls and bottom were collected and submitted to STL for analysis of TPH diesel and motor oil by USEPA Method 8015B. Results of the confirmation samples are summarized on Table 4.11. The laboratory analytical reports are included in Appendix N. Approximate sample locations are shown on Figure 4.5. Low levels of TPH diesel and motor oil were detected in the confirmation samples, but at concentrations below the RGs.

A total of 38 truckloads of the TPH-impacted black pipe-backfill material were transported to Altamont Landfill in Livermore, California from April 16, 2007 through June 18, 2007. At first it was believed that the extent of the black material in the subsurface was limited and only approximately 100 cubic yards of material would be generated. Thus, on the first day of excavation (April 16, 2007), the black material was direct loaded onto trucks and transported under Straight Bills of Lading to the Altamont Landfill. After the first day of excavation, it was clear that the extent of the black pipe-backfill material was greater than first anticipated. Thus, the black material was excavated and stockpiled on visqueen adjacent to the excavation and transported off-site to the Altamont Landfill on April 18 through May 2, 2007. On April 18, 2007, loading of the stockpile began without ENVIRON's knowledge and a total of nine truckloads of material left the site without the Straight Bill of Lading documentation. The remainder of material shipped to Altamont (April 19 through June 18, 2007) was accompanied by the Straight Bill of Lading documentation. A total of 536.25 tons of the TPH-impacted black material was transported to the Altamont Landfill. Copies of the Truck Log and Straight Bills of Lading are included as Appendix O.

### 4.5.3 Building 018 Vault

On April 9, 2007, Ferma pumped out the liquid observed inside the Building 018 vault. Photographs of the vault found near Building 018 are provided in Appendix A, Photos 23 and 24. Two 55-gallon drums of liquid were generated to be disposed off-site. On April 30, 2007, the liquid from these two 55-gallon drums was removed by a vacuum truck. The liquid was transported off-site in the same truck and under the same manifest as the liquid removed from WV-11 (described in greater detail in Section 4.6.1 below). The empty 55-gallon drums were recycled. Following the removal of the liquid, Ferma removed the manhole and the concrete vault. An environmental engineer from ENVIRON inspected the soils beneath the vault. No indications of a release (visual staining, odor) were observed in the soil beneath the B018 vault.

## 4.6 Parcel O-5

Other remaining areas identified in Parcel O-5 included WV-11. Areas in Parcel O-5 discovered as part of the CMS included the black soil in Raleigh Road, Building 051 manhole, and the black soil in the Building 051 parking lot. These areas are discussed below.

### 4.6.1 WV-11

An environmental engineer from ENVIRON was on-site during demolition of the Cooling Tower at Building 051. Photographs of WV-11 are provided in Appendix A, Photos 25 through 27. As described above, blow down from the Building 051 cooling tower was formerly collected in WV-11 and discharged to the on-site wastewater treatment plant (Building 110) in the Core Area. In 1994, the piping from WV-11 to Building 110 was closed consistent with IBM's Closure Plan and WV-11 was connected to the municipal sanitary sewer. WV-11 was a concrete vault approximately 14 feet wide by 22 feet long and approximately 22 feet deep.

Prior to demolition, liquid was observed inside WV-11. It was unknown where this liquid had originated from. A sample of the liquid was collected (GW-B051-WV-11) and submitted to STL for analysis of VOCs by USEPA Method 8260B and TPH diesel and motor oil by USEPA Method 8015B. The laboratory analytical data is included in Appendix P. Toluene was the only VOC detected at a concentration of 2.0 µg/L. TPH diesel range organics were detected at 1,300 µg/L, and TPH motor oil range organics were detected at 540 µg/L. Due to the elevated levels of TPH, the liquid was removed and appropriately treated and disposed, prior to demolition of the waste vault.

On April 27 through May 2, 2007, a vacuum truck was on-site to remove the liquid from inside WV-11. Approximately 28,000 gallons of liquid were pumped from the waste vault. Approximately 10,000 gallons of this liquid were treated in Hitachi's on-site wastewater treatment facility. A total of 151,148 pounds (roughly 18,167 gallons) of this liquid were transported off-site as California non-RCRA hazardous waste for treatment at Romic in East Palo Alto, California. A copy of the manifest is included in Appendix Q.

Following removal of the liquid, Ferma demolished the concrete bottom of the waste vault. After removing the concrete, an environmental engineer from ENVIRON inspected the soils immediately beneath the concrete. There were no indications of a historic release (visual staining, odor) identified in the soil beneath the waste vault.

The remainder of the concrete slab in the cooling tower area was removed by Ferma on May 14, 2007. An environmental engineer from ENVIRON inspected the soils immediately beneath the concrete. There were no indications of a historic release (visual staining, odor) identified in the soil beneath the cooling tower slab.

### 4.6.2 Black Soil in Raleigh Road

On March 7, 2007, a sample of the black material observed in the Raleigh Road was collected using a hand-hammered ARTS-brand sampling device. A photograph of this area is provided in Appendix A, Photo 28. The sample was submitted to STL for analysis of VOCs by USEPA Method 8260B, TPH diesel and motor oil by USEPA Method 8015B, and CAM 17 Metals by USEPA Method 6010B and 7470/7471. The sample results are summarized in Table 4.12. The laboratory analytical report is included in Appendix R. VOCs were not detected at concentrations above the reporting limits. TPH and metals were detected at levels below the residential soil RGs.

### 4.6.3 Building 051 Manhole

On April 9, 2007, Ferma pumped out the liquid observed inside the Building 051 manhole. Three 55-gallon drums of liquid were generated to be disposed off-site. On April 30, 2007, the liquid from these three 55-gallon drums was removed by a vacuum truck. The liquid was transported off-site to Romic in the same truck and under the same manifest as the liquid removed from WV-11 (described in greater detail in Section 4.6.1 above). The empty 55-gallon drums were recycled.

Following the removal of the liquid, Ferma removed the manhole and the PVC pipes associated with the manhole on April 11 and May 15, 2007. An environmental engineer from ENVIRON inspected the soils beneath the manhole and PVC pipes. No indications of a release (visual staining, odor) were observed in the soil. Photographs of the Building 051 manhole area are provided in Appendix A, Photos 29 and 30.

### 4.6.4 Black Soil in Building 051 Parking Lot

On April 26, 2007, a sample of the black material observed in the parking lot east of Building 051 (B051-PL-S1) was collected using a hand-hammered ARTS-brand sampling device. Although a photograph of the black material was not taken, a photograph showing the general soil conditions beneath the former Building 051 parking lot is provided in Appendix A, Photo 31. The sample was submitted to STL for analysis of VOCs by USEPA Method 8260B, TPH diesel and motor oil by USEPA Method 8015B, CAM 17 Metals by USEPA Method 6010B and 7470/7471, and pH by USEPA Method 9045. The sample results are summarized in Table 4.13. The laboratory analytical report is included in Appendix S. Acetone was the only VOC constituent detected at a concentration of 0.110 mg/kg, below the residential soil RG of 200 mg/kg. TPH and metals were detected at levels below the residential soil RGs. The pH result was 7.20, which is within the range for naturally occurring soils.

# 5.0 CONCLUSIONS

Based upon the results of inspection and sampling performed as part of the SI/SP Attachment VIII and as part of the CMS Report, no further investigation is recommended for the Redevelopment Property in the areas discussed in this Completion Report.

## 6.0 REFERENCES


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# TABLES

**TABLE 4.1**
**Sample Identification Table - Other Remaining Areas**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Date | Parcel | Sample Type | Area | Location | Sample Top Depth (ft bgs) | Sampling Consituent | USEPA Analysis Method Number |
|---|---|---|---|---|---|---|---|---|
| WV-15-1 | 10/19/2006 | O-2 | Soil | Waste Vault | Building 026 WV-15 | 0 | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | TPH | 8015B |
| 026-400-1 | 10/19/2006 | O-2 | Soil | Room 400 | Builidng 026 Room 400 | 0 | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | TPH | 8015B |
| B026-B1-1 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 0 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B1-2 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 5 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B1-3 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 10 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B1-4 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 15 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B1-5 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 20 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |

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**Sample Identification Table - Other Remaining Areas**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Date | Parcel | Sample Type | Area | Location | Sample Top Depth (ft bgs) | Sampling Consituent | USEPA Analysis Method Number |
|---|---|---|---|---|---|---|---|---|
| B026-B2-1 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 0 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B2-2 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 5 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B2-3 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 10 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B2-4 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 15 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B2-5 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 20 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B3-1 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 0 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B3-2 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 5 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |

**TABLE 4.1**
**Sample Identification Table - Other Remaining Areas**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Date | Parcel | Sample Type | Area | Location | Sample Top Depth (ft bgs) | Sampling Consituent | USEPA Analysis Method Number |
|---|---|---|---|---|---|---|---|---|
| B026-B3-3 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 10 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B3-4 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 15 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| B026-B3-5 | 10/17/2006 | O-2 | Soil | Beneath Former Chemical Storage Room in Building 026 | Building 026 | 20 | Metals | 6010B and 7470/7471 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | Hexavalent Chromium | 7196 |
| 026-Vault-GW | 10/19/2006 | O-2 | Water | Concrete clarifier found near Bldg 026 | Building 026 | N/A | VOCs | 8260B |
| | | | | | | | TPH | 8015B |
| 026-400-A1 | 11/9/2006 | O-2 | Soil | Building 026 footprint | Building 026 | 1 | pH | 9045 |
| 026-400-A2 | 11/9/2006 | O-2 | Soil | Building 026 footprint | Building 026 | 2 | pH | 9045 |
| 026-400-B1 | 11/9/2006 | O-2 | Soil | Building 026 footprint | Building 026 | 1 | pH | 9045 |
| 026-400-B2 | 11/9/2006 | O-2 | Soil | Building 026 footprint | Building 026 | 2 | pH | 9045 |
| 026-400-C1 | 11/9/2006 | O-2 | Soil | Building 026 footprint | Building 026 | 1 | pH | 9045 |
| 026-400-C2 | 11/9/2006 | O-2 | Soil | Building 026 footprint | Building 026 | 2 | pH | 9045 |
| 026-400-D1 | 11/9/2006 | O-2 | Soil | Building 026 footprint | Building 026 | 1 | pH | 9045 |
| 026-400-D2 | 11/9/2006 | O-2 | Soil | Building 026 footprint | Building 026 | 2 | pH | 9045 |
| B010-B1-5-6 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 5 | TPH | 8015B |
| B010-B1-9-10 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 9 | TPH | 8015B |
| B010-B1-14-15 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 14 | TPH | 8015B |
| B010-B1-19-20 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 19 | TPH | 8015B |
| B010-B2-4-5 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 4 | TPH | 8015B |
| B010-B2-9-10 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 9 | TPH | 8015B |

**TABLE 4.1**
**Sample Identification Table - Other Remaining Areas**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Date | Parcel | Sample Type | Area | Location | Sample Top Depth (ft bgs) | Sampling Consituent | USEPA Analysis Method Number |
|---|---|---|---|---|---|---|---|---|
| B010-B2-14-15 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 14 | TPH | 8015B |
| B010-B2-19-20 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 19 | TPH | 8015B |
| B010-B3-4-5 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 4 | TPH | 8015B |
| B010-B3-8-9 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 8 | TPH | 8015B |
| B010-B3-9-10 (dup) | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 9 | TPH | 8015B |
| B010-B3-13-14 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 13 | TPH | 8015B |
| B010-B3-19-20 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 19 | TPH | 8015B |
| B010-B4-4-5 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 4 | TPH | 8015B |
| B010-B4-9-10 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 9 | TPH | 8015B |
| B010-B4-14-15 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 14 | TPH | 8015B |
| B010-B4-19-20 | 11/27/2006 | O-2 | Soil | Near Building 010 Emergency Generator | Building 010 | 19 | TPH | 8015B |
| B026-A1 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-A2 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-A3 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-A4 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-A5 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-A6 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-A7 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-B1 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-B2 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-B3 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-B4 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-B4 Duplicate | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-B5 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-B6 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-B7 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |

**TABLE 4.1**
**Sample Identification Table - Other Remaining Areas**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Date | Parcel | Sample Type | Area | Location | Sample Top Depth (ft bgs) | Sampling Consituent | USEPA Analysis Method Number |
|---|---|---|---|---|---|---|---|---|
| B026-C1 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-C2 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-C3 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-C4 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-C5 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-C6 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-C7 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-D1 | 11/8/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-D2 | 11/9/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-D3 | 11/9/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-D4 | 11/9/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-D5 | 11/9/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-D6 | 11/9/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| B026-D7 | 11/9/2006 | O-2 | Soil Gas | Beneath Building 026 footprint | Building 026 | 5 | VOCs | TO-14 |
| WV-02-A | 11/9/2006 | O-2 | Soil Gas | In Vicinity of WV-02 (Original) | Building 026 | 5 | VOCs | TO-14 |
| WV-02-B | 11/9/2006 | O-2 | Soil Gas | In Vicinity of WV-02 (Original) | Building 026 | 5 | VOCs | TO-14 |
| WV-02-C | 11/9/2006 | O-2 | Soil Gas | In Vicinity of WV-02 (Original) | Building 026 | 5 | VOCs | TO-14 |
| WV-02-C Duplicate | 11/9/2006 | O-2 | Soil Gas | In Vicinity of WV-02 (Original) | Building 026 | 5 | VOCs | TO-14 |
| WV-02-D | 11/9/2006 | O-2 | Soil Gas | In Vicinity of WV-02 (Original) | Building 026 | 5 | VOCs | TO-14 |
| B026-CLARIFIER-A1 | 11/10/2006 | O-2 | Soil Gas | Near B026 Clarifier | Building 026 | 5 | VOCs | TO-14 |
| B026-CLARIFIER-A2 | 11/10/2006 | O-2 | Soil Gas | Near B026 Clarifier | Building 026 | 10 | VOCs | TO-14 |
| 026Clarifier-A | 1/15/2007 | O-2 | Soil | Building 026 Clarifier Piping Grave | Building 026 | 4 | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| 026Clarifier-B | 1/15/2007 | O-2 | Soil | Building 026 Clarifier Grave - North Sidewall | Building 026 | 4.5 | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| 026Clarifier-C | 1/15/2007 | O-2 | Soil | Building 026 Clarifier Grave - East Sidewall | Building 026 | 4.5 | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| 026Clarifier-D | 1/15/2007 | O-2 | Soil | Building 026 Clarifier Grave - South Sidewall | Building 026 | 4.5 | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |

**TABLE 4.1**
**Sample Identification Table - Other Remaining Areas**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Date | Parcel | Sample Type | Area | Location | Sample Top Depth (ft bgs) | Sampling Consituent | USEPA Analysis Method Number |
|---|---|---|---|---|---|---|---|---|
| 026Clarifier-E | 1/15/2007 | O-2 | Soil | Building 026 Clarifier Grave - West Sidewall | Building 026 | 4.5 | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| 026Clarifier-F | 1/15/2007 | O-2 | Soil | Building 026 Clarifier Piping Grave | Building 026 | 4 | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| 026Clarifier-G | 1/15/2007 | O-2 | Soil | Building 026 Clarifier Piping Grave | Building 026 | 4 | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| 026-Clarifier-H | 1/15/2007 | O-2 | Soil | Building 026 Clarifier Grave - Bottom | Building 026 | 9 | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| 026Clarifier-Stockpile | 1/15/2007 | O-2 | Soil | Building 026 Clarifier Stockpile | Building 026 | N/A | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| 026-Clarifier Sludge | 2/1/2007 | O-2 | Sludge | Building 026 Clarifier Sludge | Drums in Hitachi's storage facility | N/A | pH | 9045 |
| | | | | | | | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| | | | | | | | SVOCs | 8270 |
| OldWell-S1 | 1/25/2007 | O-1 | Soil | From soil observed in old brick-lined well found in Boulder Blvd. | Near Bldg 025 | 10 | VOCs | 8260B |
| | | | | | | | TPH | 8015B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471B |
| | | | | | | | pH | 9045 |
| 026S Parking Lot -1 | 10/12/2006 | O-3 | Soil | Parking lot south of Building 026 associated with former sewer | Building 026 | 0 | VOCs | 8260B |
| | | | | | | | TPH | 8015B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471B |
| | | | | | | | pH | 9045 |
| | | | | | | | SVOCs | 8270 |

**TABLE 4.1**
**Sample Identification Table - Other Remaining Areas**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Date | Parcel | Sample Type | Area | Location | Sample Top Depth (ft bgs) | Sampling Consituent | USEPA Analysis Method Number |
|---|---|---|---|---|---|---|---|---|
| B018-PIPEBACKFILL | 1/22/2007 | O-4 | Pipe backfill | Backfill around pipes near B018 | Building 018 | 2 | TPH | 8015B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471B |
| | | | | | | | SVOCs | 8270 |
| | | | | | | | pH | 9045 |
| | | | | | | | PCBs | 8080 |
| B018-EXCSW-A1 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 2.5 | TPH | 8015B |
| B018-EXCSW-D6 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 1.5 | TPH | 8015B |
| B018-EXCSW-E1 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 1.5 | TPH | 8015B |
| B018-EXCSW-F1 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 1.5 | TPH | 8015B |
| B018-EXCSW-E2 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 1.5 | TPH | 8015B |
| B018-EXCSW-F2 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 1.5 | TPH | 8015B |
| B018-EXCSW-E3 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 1.5 | TPH | 8015B |
| B018-EXCSW-F3 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 1.5 | TPH | 8015B |
| B018-EXCSW-E4 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 2.0 | TPH | 8015B |
| B018-EXCSW-F4 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 2.0 | TPH | 8015B |
| B018-EXCB-A1 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 5.0 | TPH | 8015B |
| B018-EXCB-B1 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 4.5 | TPH | 8015B |
| B018-EXCB-C1 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 3.5 | TPH | 8015B |
| B018-EXCB-D1 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 3.0 | TPH | 8015B |
| B018-EXCB-D2 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 3.5 | TPH | 8015B |
| B018-EXCB-D3 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 3.5 | TPH | 8015B |
| B018-EXCB-D4 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 2.5 | TPH | 8015B |
| B018-EXCB-D5 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 2.5 | TPH | 8015B |
| B018-EXCB-D6 | 4/19/2007 | O-4 | Soil | Excavation of black material around pipes west of B018 | Building 018 | 3.0 | TPH | 8015B |

**TABLE 4.1**
**Sample Identification Table - Other Remaining Areas**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Date | Parcel | Sample Type | Area | Location | Sample Top Depth (ft bgs) | Sampling Consituent | USEPA Analysis Method Number |
|---|---|---|---|---|---|---|---|---|
| GW-B018-Fuel Vault | 4/9/2007 | O-4 | Liquid | Liquid inside a vault found near Bldg 018. Manhole cover to vault was labeled "Fuel Vault" | B018 | N/A | VOCs | 8260B |
| | | | | | | | TPH | 8015B |
| RaleighRd-S1 | 3/7/2007 | O-5 | Soil | From stained material observed below asphalt and roadbase in Raleigh Rd. | Raleigh Rd. | 0 | VOCs | 8260B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| | | | | | | | TPH | 8015B |
| Water-B051 MANHOLE | 3/28/2007 | O-5 | Water | B051 Industrial Waste Line Manhole | B051 | N/A | VOCs | 8260B |
| | | | | | | | TPH | 8015B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471 |
| GW-B051-WV-11 | 4/9/2007 | O-5 | Liquid | Liquid inside the WV-11 near B051 | B051 | N/A | VOCs | 8260B |
| | | | | | | | TPH | 8015B |
| B051-PL-S1 | 4/26/2007 | O-5 | Soil | Stained soil observed in B051 Parking Lot | Building 051 | 0 | VOCs | 8260B |
| | | | | | | | TPH | 8015B |
| | | | | | | | CAM 17 Metals | 6010B and 7470/7471B |
| | | | | | | | pH | 9045 |

**Notes:**
bgs = below ground surface
ft = feet
N/A = not applicable
PCBs = Polychlorinated Biphenyls
SVOCs = Semi-Volatile Organic Compounds
TPH = Total Petroleum Hydrocarbons
USEPA = United States Environmental Protection Agency
VOCs = Volatile Organic Compounds

**Table 4.2**
**Summary of Soil Sampling Results - Previously Unknown Well**
**January 25, 2007**
**Hitachi GST**
**San Jose, California**

| Chemical | Remedial Goal (RG) (a) | OLDWELL-S1 |
|---|---|---|
| | | ~10 ft bgs |
| **Metals (mg/kg)** | | |
| Antimony | *31* | <2.0 |
| Arsenic | *12* | **6.4** |
| Barium | *5,400* | **150** |
| Beryllium | *150* | <0.50 |
| Cadmium | *77* | <0.50 |
| Chromium | *120,000* | **44** |
| Cobalt | *900* | **12** |
| Copper | *3,100* | **27** |
| Lead | *150* | **8.2** |
| Mercury | *23* | **0.067** |
| Molybdenum | *390* | <0.99 |
| Nickel | *1,500* | **73** |
| Silver | *390 (b)* | <0.99 |
| Thallium | *5.2 (b)* | <0.99 |
| Vanadium | *78* | **31** |
| Zinc | *23,000* | **52** |
| **pH** | | |
| pH | -- | **7.36** |

**Notes:**

bgs = below ground surface

ft = feet

mg/kg = milligrams per kilogram

Sample was submitted for analysis of VOCs, TPH, CAM 17 metals, and pH. VOCs and TPH constituents were not detected above laboratory reporting limits. Only metals detected on the Redevelopment Property are shown in the table.

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON. Dated June 28, 2006; Revised August 31, 2006.* )

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*

**TABLE 4.3**
**Summary of Soil Sampling Results - Emergency Generator at Former Building 010**
**November 2006**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Depth (feet bgs) | Sample Date | TPH - Diesel (mg/kg) | TPH - Motor Oil (mg/kg) |
|---|---|---|---|---|
| | | *RG (mg/kg) (a)* | *5,200* | *2,300* |
| B010-B1-5-6' | 5.0 - 6.0 | 11/27/2006 | < 0.99 | < 50 |
| B010-B1-9-10' | 9.0 - 10.0 | 11/27/2006 | < 0.99 | < 49 |
| B010-B1-14-15' | 14.0 - 15.0 | 11/27/2006 | < 0.99 | < 50 |
| B010-B1-19-20' | 19.0 - 20.0 | 11/27/2006 | < 0.99 | < 49 |
| B010-B2-4-5' | 4.0 - 5.0 | 11/27/2006 | **4.4** | < 50 |
| B010-B2-9-10' | 9.0 - 10.0 | 11/27/2006 | < 0.98 | < 49 |
| B010-B2-14-15' | 14.0 - 15.0 | 11/27/2006 | < 0.99 | < 49 |
| B010-B2-19-20' | 19.0 - 20.0 | 11/27/2006 | < 1.0 | < 50 |
| B010-B3-4-5' | 4.0 - 5.0 | 11/27/2006 | < 0.99 | < 50 |
| B010-B3-8-9' | 8.0 - 9.0 | 11/27/2006 | < 1.0 | < 50 |
| B010-B3-9-10' (dup) | 9.0 - 10.0 | 11/27/2006 | < 0.99 | < 49 |
| B010-B3-13-14' | 13.0 - 14.0 | 11/27/2006 | < 1.0 | < 50 |
| B010-B3-19-20' | 19.0 - 20.0 | 11/27/2006 | < 0.99 | < 49 |
| B010-B4-4-5' | 4.0 - 5.0 | 11/27/2006 | < 0.98 | < 49 |
| B010-B4-9-10' | 9.0 - 10.0 | 11/27/2006 | < 0.98 | < 49 |
| B010-B4-14-15' | 14.0 - 15.0 | 11/27/2006 | < 0.99 | < 50 |
| B010-B4-19-20' | 19.0 - 20.0 | 11/27/2006 | < 0.99 | < 50 |

**Notes:**
< = not detected above the laboratory reporting limit.
bgs = below ground surface.
mg/kg = milligrams per kilogram.

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON. Dated June 28, 2006; Revised August 31, 2006.* )

**Table 4.4**
**Summary of Soil Sampling Results - Waste Vault 15**
**October 19, 2006**
**Hitachi GST**
**San Jose, California**

| Chemical | Remedial Goal (RG) (a) | WV-15-1 |
|---|---|---|
| | | 0-0.5 ft bgs |
| **Volatile Organic Compounds (VOCs) (mg/kg)** | | |
| Acetone | *200* | **0.093** |
| **Total Petroleum Hydrocarbons (TPH) (mg/kg)** | | |
| TPH-Diesel | *5,200* | **7.9** |
| TPH-Motor Oil | *2,300* | <50 |
| **Metals (mg/kg)** | | |
| Antimony | *31* | < 2.0 |
| Arsenic | *12* | **4.9** |
| Barium | *5,400* | **150** |
| Beryllium | *150* | **0.51** |
| Cadmium | *77* | <0.49 |
| Chromium | *120,000* | **52** |
| Cobalt | *900* | **12** |
| Copper | *3,100* | **30** |
| Lead | *150* | **9.3** |
| Mercury | *23* | **0.058** |
| Molybdenum | *390* | <0.98 |
| Nickel | *1,500* | **79** |
| Silver | *390 (b)* | <0.98 |
| Thallium | *5.2 (b)* | <0.98 |
| Vanadium | *78* | **30** |
| Zinc | *23,000* | **54** |
| **pH** | | |
| pH | -- | **7.08** |

**Notes:**

bgs = below ground surface

ft = feet

mg/kg = milligrams per kilogram

< = not detected at the listed reporting limit

Sample was analyzed for VOCs, TPH, metals, and pH. Only detected VOCs are included in the table; other VOCs were detected below laboratory reporting limits. Only metals detected on the Redevelopment Property are included in the table.

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON. Dated June 28, 2006; Revised August 31, 2006.* )

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*

**TABLE 4.5**
**Summary of Soil Sampling Results - Former Chemical Storage Room at Building 026**
**October 17, 2006**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Depth (feet bgs) | Sample Date | Acetone (mg/kg) | Trichloroethene (mg/kg) | Antimony (mg/kg) | Arsenic (mg/kg) | Barium (mg/kg) | Beryllium (mg/kg) | Cadmium (mg/kg) | Chromium (Hexavalent) (mg/kg) | Chromium (mg/kg) | Cobalt (mg/kg) | Copper (mg/kg) | Lead (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *RG (mg/kg) (a)* | *200* | *0.019* | *31* | *12* | *5,400* | *150* | *77* | *17* | *120,000* | *900* | *3,100* | *150* |
| B026-B1-1 | 0 - 0.5 | 10/17/2006 | < 0.048 | **0.0051** | < 2 | **3.9** | **100** | < 0.5 | < 0.5 | < 0.80 | **35** | **6.2** | **48** | **4.8** |
| B026-B1-2 | 4.5 -5.0 | 10/17/2006 | < 0.05 | < 0.005 | < 2 | **5.3** | **160** | < 0.51 | < 0.51 | < 0.80 | **61** | **11** | **24** | **6.4** |
| B026-B1-3 | 9.5 - 10.0 | 10/17/2006 | < 0.05 | < 0.005 | < 2 | **3.7** | **59** | < 0.51 | < 0.51 | < 0.80 | **40** | **7.4** | **19** | **3.3** |
| B026-B1-4 | 14.5 - 15.0 | 10/17/2006 | < 0.05 | < 0.005 | < 2.1 | **6.5** | **120** | < 0.52 | < 0.52 | < 0.80 | **40** | **11** | **29** | **6.8** |
| B026-B1-5 | 19.5 - 20.0 | 10/17/2006 | < 0.049 | < 0.0049 | < 1.9 | **6.6** | **120** | < 0.49 | < 0.49 | < 0.80 | **40** | **12** | **30** | **6.8** |
| B026-B2-1 | 0 - 0.5 | 10/17/2006 | < 0.05 | **0.0074** | < 2 | **5.4** | **99** | < 0.51 | < 0.51 | < 0.80 | **61** | **9.8** | **24** | **6.1** |
| B026-B2-2 | 4.5 -5.0 | 10/17/2006 | < 0.049 | < 0.0049 | < 1.9 | **6.1** | **150** | **0.48** | < 0.48 | < 0.80 | **57** | **11** | **30** | **14** |
| B026-B2-3 | 9.5 - 10.0 | 10/17/2006 | < 0.05 | < 0.005 | < 2 | **5.6** | **150** | < 0.5 | < 0.5 | < 0.80 | **49** | **10** | **22** | **4.5** |
| B026-B2-4 | 14.5 - 15.0 | 10/17/2006 | < 0.049 | < 0.0049 | < 2.1 | **6.3** | **100** | < 0.52 | < 0.52 | < 0.80 | **34** | **9.8** | **26** | **5.9** |
| B026-B2-5 | 19.5 - 20.0 | 10/17/2006 | < 0.05 | < 0.005 | < 2 | **7.2** | **120** | < 0.51 | < 0.51 | < 0.80 | **43** | **13** | **32** | **6.9** |
| B026-B3-1 | 0 - 0.5 | 10/17/2006 | < 0.049 | < 0.0049 | < 2.1 | < 1 | **6** | < 0.52 | < 0.52 | < 0.80 | **5.6** | < 1 | **1.8** | **1.8** |
| B026-B3-2 | 4.5 -5.0 | 10/17/2006 | **0.095** | < 0.005 | < 2 | **4.7** | **120** | < 0.5 | < 0.5 | < 0.80 | **41** | **9.5** | **23** | **6.7** |
| B026-B3-3 | 9.5 - 10.0 | 10/17/2006 | < 0.05 | < 0.005 | < 2 | **7.9** | **200** | **0.61** | < 0.49 | < 0.80 | **43** | **12** | **33** | **8.0** |
| B026-B3-4 | 14.5 - 15.0 | 10/17/2006 | < 0.049 | < 0.0049 | < 2.1 | **6.9** | **140** | < 0.52 | < 0.52 | < 0.80 | **38** | **11** | **28** | **6.9** |
| B026-B3-5 | 19.5 - 20.0 | 10/17/2006 | < 0.05 | < 0.005 | < 2.1 | **6.3** | **190** | < 0.52 | < 0.52 | < 0.80 | **44** | **9.9** | **30** | **6.2** |

**Notes:**
-- = not analyzed
bgs = below ground surface
mg/kg = milligram per kilogram
n/a = not available

Samples were analyzed for volatile organic compounds (VOCs) and metals. Only detected VOCs are shown in the table above. Only metals detected on the Redevelopment Property are included in the table. Results detected above the reporting limit are shown in **bold**.

(a) Remedial Goals (RGs) as presented in the Corrective Measures Study (CMS) for the Redevelopment Property (*Source: CMS Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, June 28, 2006: revised August 31, 2006* ).

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*

**TABLE 4.5**
**Summary of Soil Sampling Results - Former Chemical Storage Room at Building 026**
**October 17, 2006**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Depth (feet bgs) | Sample Date | Mercury (mg/kg) | Molybdenum (mg/kg) | Nickel (mg/kg) | Silver (mg/kg) | Thallium (mg/kg) | Vanadium (mg/kg) | Zinc (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|
| | | *RG (mg/kg) (a)* | *23* | *390* | *1,500* | *390 (b)* | *5.2 (b)* | *78* | *23,000* |
| B026-B1-1 | 0 - 0.5 | 10/17/2006 | <0.049 | < 0.99 | **51** | < 0.99 | < 0.99 | **42** | **33** |
| B026-B1-2 | 4.5 -5.0 | 10/17/2006 | **0.051** | < 1 | **110** | < 1 | < 1 | **32** | **44** |
| B026-B1-3 | 9.5 - 10.0 | 10/17/2006 | <0.049 | < 1 | **81** | < 1 | < 1 | **27** | **36** |
| B026-B1-4 | 14.5 - 15.0 | 10/17/2006 | **0.063** | < 1 | **63** | < 1 | < 1 | **28** | **50** |
| B026-B1-5 | 19.5 - 20.0 | 10/17/2006 | **0.089** | < 0.97 | **74** | < 0.97 | < 0.97 | **28** | **50** |
| B026-B2-1 | 0 - 0.5 | 10/17/2006 | **0.061** | < 1 | **100** | < 1 | < 1 | **29** | **42** |
| B026-B2-2 | 4.5 -5.0 | 10/17/2006 | **0.095** | < 0.95 | **77** | < 0.95 | < 0.95 | **31** | **53** |
| B026-B2-3 | 9.5 - 10.0 | 10/17/2006 | **0.056** | **1.1** | **91** | < 0.99 | < 0.99 | **30** | **42** |
| B026-B2-4 | 14.5 - 15.0 | 10/17/2006 | **0.086** | < 1 | **63** | < 1 | < 1 | **25** | **44** |
| B026-B2-5 | 19.5 - 20.0 | 10/17/2006 | **0.077** | < 1 | **82** | < 1 | < 1 | **31** | **53** |
| B026-B3-1 | 0 - 0.5 | 10/17/2006 | <0.049 | < 1 | **5.5** | < 1 | < 1 | **3.1** | **6.4** |
| B026-B3-2 | 4.5 -5.0 | 10/17/2006 | **0.058** | **1.3** | **69** | < 1 | < 1 | **30** | **42** |
| B026-B3-3 | 9.5 - 10.0 | 10/17/2006 | **0.056** | < 0.98 | **70** | < 0.98 | < 0.98 | **33** | **54** |
| B026-B3-4 | 14.5 - 15.0 | 10/17/2006 | **0.13** | < 1 | **65** | < 1 | < 1 | **29** | **50** |
| B026-B3-5 | 19.5 - 20.0 | 10/17/2006 | **0.068** | < 1 | **68** | < 1 | < 1 | **30** | **53** |

**Notes:**
-- = not analyzed
bgs = below ground surface
mg/kg = milligram per kilogram
n/a = not available

Samples were analyzed for volatile organic compounds (VOCs) and metals. Only detected VOCs are shown in the table above. Only metals detected on the Redevelopment Property are included in the table. Results detected above the reporting limit are shown in **bold**.

(a) Remedial Goals (RGs) as presented in the Corrective Measures Study (CMS) for the Redevelopment Property (*Source: CMS Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, June 28, 2006: revised August 31, 2006* ).

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*

**Table 4.6**
**Summary of Soil Sampling Results - Building 026 Room 400**
**October 19, 2006**
**Hitachi GST**
**San Jose, California**

| Chemical | Remedial Goal (a) | 026-400-1 |
|---|---|---|
| | | 0-0.5 ft bgs |
| **Total Petroleum Hydrocarbons (TPH) (mg/kg)** | | |
| TPH-Diesel | *5,200* | **8.1** |
| TPH-Motor Oil | *2,300* | <48 |
| **Metals (mg/kg)** | | |
| Antimony | *31* | < 2.0 |
| Arsenic | *12* | **5.8** |
| Barium | *5,400* | **87** |
| Beryllium | *150* | <0.51 |
| Cadmium | *77* | <0.51 |
| Chromium (total) | *120,000* | **39** |
| Cobalt | *900* | **7.8** |
| Copper | *3,100* | **24** |
| Lead | *150* | **8.0** |
| Mercury | *23* | <0.050 |
| Molybdenum | *390* | <1.0 |
| Nickel | *1,500* | **66** |
| Silver | *390 (b)* | <1.0 |
| Thallium | *5.2 (b)* | <1.0 |
| Vanadium | *78* | **31** |
| Zinc | *23,000* | **46** |
| **pH** | | |
| pH | -- | **10.3** |

**Notes:**

bgs = below ground surface

ft = feet

mg/kg = milligrams per kilogram

< = not detected at the listed reporting limit

Sample was analyzed for volatile organic compounds (VOCs), TPH, metals, and pH. No VOCs were detected above laboratory reporting limits. Only metals detected on the Redevelopment Property are included in the table.

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON. Dated June 28, 2006; Revised August 31, 2006.* )

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*

**TABLE 4.7**
**Summary of Soil Gas Sampling Results -Former Building 026**
**November 2006**
**Hitachi GST**
**San Jose, California**

| Sample Location ID | Sample Date | Sample Depth (feet bgs) | Benzene (ug/L) | Bromomethane (ug/L) | Carbon Tetrachloride (ug/L) | Chloroethane (ug/L) | Chloroform (ug/L) | Chloromethane (ug/L) | Dichlorodifluoro-methane (ug/L) | 1,1-Dichloroethane (ug/L) | 1,1-Dichloroethene (ug/L) | cis-1,2 Dichloroethene (ug/L) | 1,1-Difluoroethane (ug/L) | Ethylbenzene (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Risk-Based Target Concentration (RBTC) (ug/L) (a)* | | *5.0* | *0.241* | *9.28* | *0.179* | *6,530* | *1.09* | *2.80* | *412* | *4.91* | *110* | *65.5* | *NC* | *3,690* |
| | | *10.0* | *0.477* | *18.6* | *0.357* | *11,700* | *2.14* | *5.42* | *828* | *8.93* | *218* | *131* | *NC* | *7,380* |
| B026-A1 | 11/8/2006 | 5.0 | **0.033** | <0.0026 | <0.0042 | <0.0017 | <0.0032 | <0.0014 | <0.0033 | <0.0027 | <0.0026 | <0.0026 | <1.32 | **0.025** |
| B026-A2 | 11/8/2006 | 5.0 | **0.035** | <0.0027 | <0.0043 | <0.0018 | <0.0034 | **0.0019** | <0.0034 | <0.0028 | <0.0027 | <0.0027 | **7.34** | **0.031** |
| B026-A3 | 11/8/2006 | 5.0 | **0.068** | <0.0028 | <0.0046 | <0.0019 | <0.0036 | <0.0015 | <0.0036 | **0.0066** | <0.0029 | <0.0029 | <1.46 | **0.023** |
| B026-A4 | 11/8/2006 | 5.0 | **0.072** | <0.0027 | <0.0044 | <0.0019 | <0.0034 | <0.0015 | <0.0035 | <0.0029 | <0.0028 | <0.0028 | **0.171** | **0.035** |
| B026-A5 | 11/8/2006 | 5.0 | **0.0052** | <0.0029 | <0.0047 | <0.0020 | <0.0036 | <0.0015 | <0.0037 | <0.0030 | <0.0030 | <0.0030 | **0.188** | **0.022** |
| B026-A6 | 11/8/2006 | 5.0 | **0.013** | <0.0029 | <0.0047 | <0.0020 | <0.0036 | **0.0025** | <0.0037 | <0.0030 | <0.0030 | <0.0030 | **1.55** | **0.029** |
| B026-A7 | 11/8/2006 | 5.0 | **0.03** | <0.0032 | **0.0055** | <0.0022 | <0.0041 | <0.0017 | **0.0069** | <0.0034 | **0.0067** | <0.0033 | <1.66 | **0.024** |
| B026-B1 | 11/8/2006 | 5.0 | **0.073** | <0.0029 | <0.0047 | <0.0020 | <0.0036 | **0.0018** | <0.0037 | <0.0030 | <0.0029 | <0.0029 | **0.071** | **0.049** |
| B026-B2 | 11/8/2006 | 5.0 | **0.078** | <0.0029 | <0.0047 | <0.0020 | <0.0037 | <0.0016 | <0.0037 | <0.0031 | <0.0030 | <0.0030 | **0.201** | **0.021** |
| B026-B3 | 11/8/2006 | 5.0 | **0.036** | <0.0029 | <0.0047 | <0.0020 | <0.0037 | 0.0017 | <0.0037 | <0.0030 | <0.0030 | <0.0030 | **0.898** | **0.038** |
| B026-B4 | 11/8/2006 | 5.0 | **0.034** | <0.0029 | <0.0047 | <0.0020 | <0.0037 | <0.0015 | <0.0037 | **0.0075** | <0.0030 | **0.0039** | **0.220** | **0.014** |
| B026-B4 DUPLICATE | 11/8/2006 | 5.0 | **0.036** | <0.0027 | <0.0044 | <0.0018 | <0.0034 | <0.0014 | <0.0034 | **0.012** | <0.0028 | **0.0051** | **1.09** | **0.013** |
| B026-B5 | 11/8/2006 | 5.0 | **0.028** | <0.0029 | <0.0047 | <0.0020 | **0.0045** | <0.0015 | <0.0037 | <0.0030 | <0.0030 | <0.0030 | **0.120** | **0.046** |
| B026-B6 | 11/8/2006 | 4.5 | **0.18** | <0.0028 | <0.0046 | <0.0019 | <0.0036 | <0.0015 | <0.0036 | **0.014** | <0.0029 | <0.0029 | **0.013** | **0.02** |
| B026-B7 | 11/8/2006 | 5.0 | **0.047** | <0.0029 | <0.0046 | **0.0028** | <0.0036 | 0.0016 | <0.0036 | **0.0071** | <0.0029 | <0.0029 | **1.01** | **0.037** |
| B026-C1 | 11/8/2006 | 4.0 | **0.075** | <0.0030 | <0.0049 | <0.0020 | <0.0038 | **0.0023** | <0.0038 | <0.0031 | <0.0031 | <0.0031 | **0.013** | **0.019** |
| B026-C2 | 11/8/2006 | 5.0 | **0.032** | <0.0028 | <0.0046 | <0.0019 | <0.0036 | **0.0016** | <0.0036 | <0.0030 | <0.0029 | <0.0029 | **1.12** | **0.038** |
| B026-C3 | 11/8/2006 | 5.0 | **0.94** | <0.033 | <0.054 | <0.023 | <0.042 | <0.018 | <0.042 | <0.035 | <0.034 | <0.034 | <17.1 | **0.21** |
| B026-C4 | 11/8/2006 | 5.0 | **0.0061** | <0.0028 | <0.0046 | <0.0019 | <0.0035 | <0.0015 | <0.0036 | <0.0029 | <0.0029 | <0.0029 | **0.223** | **0.015** |
| B026-C5 | 11/8/2006 | 5.0 | **0.059** | <0.0028 | <0.0046 | **0.005** | <0.0035 | <0.0015 | <0.0036 | **0.059** | **0.0053** | <0.0029 | <1.45 | **0.018** |
| B026-C6 | 11/8/2006 | 5.0 | **0.039** | <0.0029 | <0.0046 | **0.013** | **0.0042** | <0.0015 | 0.0068 | **0.05** | **0.0091** | <0.0029 | **1.03** | **0.029** |
| B026-C7 | 11/8/2006 | 5.0 | **0.11** | <0.0030 | <0.0048 | **0.02** | <0.0038 | 0.0029 | <0.0038 | **0.026** | **0.007** | <0.0031 | **4.08** | **0.018** |
| B026-D1 | 11/8/2006 | 5.0 | **0.027** | <0.0027 | <0.0044 | <0.0019 | <0.0034 | **0.002** | <0.0035 | <0.0029 | <0.0028 | <0.0028 | **1.17** | **0.035** |
| B026-D2 | 11/9/2006 | 4.0 | **0.036** | <0.012 | <0.020 | <0.0083 | <0.015 | <0.0065 | <0.016 | <0.013 | <0.013 | <0.013 | <6.32 | **0.023** |
| B026-D3 | 11/9/2006 | 5.0 | **0.089** | **0.0035** | <0.046 | <0.0019 | <0.0036 | <0.0015 | <0.0036 | **0.0085** | <0.0029 | <0.0029 | <1.47 | **0.057** |
| B026-D4 | 11/9/2006 | 4.0 | **0.083** | <0.015 | <0.025 | <0.01 | <0.019 | <0.0082 | <0.02 | <0.016 | <0.016 | <0.016 | **3.7** | **0.11** |
| B026-D5 | 11/9/2006 | 4.5 | **0.057** | <0.027 | <0.044 | <0.019 | <0.034 | <0.015 | <0.035 | **0.034** | <0.028 | <0.028 | <14.1 | <0.031 |
| B026-D6 | 11/9/2006 | 4.5 | **0.082** | <0.027 | <0.044 | **0.041** | <0.034 | <0.014 | <0.035 | **0.079** | <0.028 | <0.028 | <14 | <0.03 |
| B026-D7 | 11/9/2006 | 5.0 | **0.093** | <0.039 | <0.064 | <0.027 | <0.049 | <0.021 | <0.05 | <0.041 | <0.04 | <0.04 | **0.326** | <0.044 |
| WV-02-A | 11/9/2006 | 5.0 | **0.015** | <0.0029 | <0.0046 | <0.0019 | **0.0039** | <0.0015 | <0.0036 | <0.0030 | <0.0029 | <0.0029 | **0.462** | **0.048** |
| WV-02-B | 11/9/2006 | 5.0 | **0.010** | <0.0029 | <0.0046 | <0.0019 | <0.0036 | <0.0015 | <0.0036 | <0.0030 | <0.0029 | <0.0029 | <1.47 | **0.017** |
| WV-02-C | 11/9/2006 | 5.0 | **0.012** | <0.0028 | <0.0045 | <0.0019 | <0.0035 | <0.0015 | <0.0035 | <0.0029 | <0.0028 | <0.0028 | <1.43 | **0.032** |
| WV-02-C DUPLICATE | 11/9/2006 | 5.0 | **0.0085** | <0.0030 | <0.0048 | <0.0020 | <0.0037 | <0.0016 | <0.0038 | <0.0031 | <0.0030 | <0.0030 | **2.99** | **0.020** |
| WV-02-D | 11/9/2006 | 5.0 | **0.038** | <0.0029 | <0.0047 | <0.0020 | <0.0037 | <0.0016 | <0.0037 | **0.0083** | <0.0030 | <0.0030 | **4.35** | **0.0095** |
| B026-CLARIFIER-A1 | 11/10/2006 | 5.0 | **0.013** | <0.0030 | <0.0048 | <0.0020 | <0.0037 | **0.0024** | **0.0039** | <0.0031 | <0.0030 | <0.0030 | **27** | **0.039** |
| B026-CLARIFIER-A2 | 11/10/2006 | 10.0 | **0.025** | <0.0031 | <0.0050 | <0.0021 | <0.0039 | <0.0017 | <0.0040 | <0.0032 | <0.0032 | <0.0032 | <1.6 | **0.063** |

**Notes:**
< = the analyte was not detected above the detection limi
bgs = below ground surface

Results shown in micrograms per liter (ug/L) of vapor
Numbers in bold denote a detection above the laboratory reporting limit; only detected constituents are included on this table.

(a) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005* ).

**TABLE 4.7**
**Summary of Soil Gas Sampling Results -Former Building 026**
**November 2006**
**Hitachi GST**
**San Jose, California**

| Sample Location ID | Sample Date | Sample Depth (feet bgs) | Methylene Chloride (ug/L) | o-Xylene (ug/L) | m,p-Xylene (ug/L) | Tetrachloroethene (ug/L) | Toluene (ug/L) | Trichloroethene (ug/L) | Trichlorofluoro-methane (ug/L) | 1,1,2-Trichloro-1,2,2-trifluoroethane (ug/L) | 1,1,1-Trichloroethane (ug/L) | 1,3,5-Trimethylbenzene (ug/L) | 1,2,4-Trimethylbenzene (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Risk-Based Target Concentration (RBTC) (ug/L) (a)* | | *5.0* | *6.06* | *1,130* | *1,260* | *1.37* | *485* | *3.79* | *8,870* | *53,700* | *1,790* | *11.0* | *11.0* |
| | | *10.0* | *11.9* | *2,240* | *2,520* | *2.75* | *962* | *7.56* | *18,600* | *107,300* | *3,570* | *22.0* | *21.9* |
| B026-A1 | 11/8/2006 | 5.0 | <0.046 | **0.037** | **0.11** | <0.0045 | **0.11** | <0.0035 | **0.059** | **3.1** | **0.017** | **0.0095** | **0.036** |
| B026-A2 | 11/8/2006 | 5.0 | **0.049** | **0.044** | **0.13** | <0.0047 | **0.14** | <0.0037 | **0.12** | **1.4** | **0.0081** | **0.01** | **0.039** |
| B026-A3 | 11/8/2006 | 5.0 | <0.051 | **0.033** | **0.097** | <0.0050 | **0.14** | **0.36** | **1.9** | **0.31** | **0.06** | **0.0075** | **0.026** |
| B026-A4 | 11/8/2006 | 5.0 | **0.049** | **0.046** | **0.15** | <0.0048 | **0.18** | **0.14** | **1.3** | **0.36** | **0.022** | **0.011** | **0.038** |
| B026-A5 | 11/8/2006 | 5.0 | <0.052 | **0.033** | **0.097** | <0.0051 | **0.089** | <0.0040 | **0.05** | **39** | **0.047** | **0.0077** | **0.029** |
| B026-A6 | 11/8/2006 | 5.0 | <0.052 | **0.037** | **0.12** | <0.0051 | **0.15** | <0.0040 | **0.18** | **0.03** | <0.0041 | **0.0081** | **0.031** |
| B026-A7 | 11/8/2006 | 5.0 | <0.058 | **0.033** | **0.096** | <0.0056 | **0.11** | <0.0045 | **120** | **1.7** | **0.011** | **0.0067** | **0.024** |
| B026-B1 | 11/8/2006 | 5.0 | <0.051 | **0.063** | **0.2** | <0.0050 | **0.23** | <0.0040 | <0.0083 | **0.5** | **0.0064** | **0.013** | **0.052** |
| B026-B2 | 11/8/2006 | 5.0 | <0.052 | **0.03** | **0.087** | <0.0051 | **0.1** | <0.0041 | <0.0085 | **0.049** | <0.0041 | **0.007** | **0.026** |
| B026-B3 | 11/8/2006 | 5.0 | <0.052 | **0.05** | **0.15** | <0.0051 | **0.18** | **0.04** | <0.0084 | **0.038** | **0.14** | **0.012** | **0.042** |
| B026-B4 | 11/8/2006 | 5.0 | <0.052 | **0.02** | **0.055** | <0.0051 | **0.067** | **0.2** | **41** | **3.9** | **0.038** | **0.005** | **0.017** |
| B026-B4 DUPLICATE | 11/8/2006 | 5.0 | <0.048 | **0.021** | **0.051** | **0.0067** | **0.062** | **0.22** | **52** | **3.5** | **0.058** | **0.0067** | **0.018** |
| B026-B5 | 11/8/2006 | 5.0 | <0.052 | **0.057** | **0.18** | **0.012** | **0.22** | **0.021** | **0.016** | **5.6** | **0.033** | **0.011** | **0.038** |
| B026-B6 | 11/8/2006 | 4.5 | <0.051 | **0.028** | **0.083** | <0.0050 | **0.13** | **0.0083** | **0.02** | **0.1** | **0.023** | **0.0071** | **0.026** |
| B026-B7 | 11/8/2006 | 5.0 | <0.051 | **0.049** | **0.14** | <0.0050 | **0.19** | <0.0039 | <0.0083 | **0.026** | **0.13** | **0.011** | **0.041** |
| B026-C1 | 11/8/2006 | 4.0 | <0.054 | **0.028** | **0.082** | <0.0053 | **0.094** | <0.0042 | **0.018** | **0.062** | <0.0042 | **0.0071** | **0.026** |
| B026-C2 | 11/8/2006 | 5.0 | <0.051 | **0.047** | **0.15** | <0.0050 | **0.19** | **0.0083** | <0.0082 | **0.055** | **0.0067** | **0.0095** | **0.035** |
| B026-C3 | 11/8/2006 | 5.0 | <0.59 | **0.3** | **0.9** | <0.058 | **1.1** | <0.046 | <0.096 | **46** | <0.047 | **0.077** | **0.29** |
| B026-C4 | 11/8/2006 | 5.0 | <0.050 | **0.019** | **0.066** | <0.0049 | **0.097** | <0.0039 | <0.0081 | <0.011 | <0.0040 | **0.0041** | **0.014** |
| B026-C5 | 11/8/2006 | 5.0 | <0.050 | **0.026** | **0.074** | **0.0087** | **0.084** | **0.53** | **0.12** | **2** | **0.65** | **0.0063** | **0.021** |
| B026-C6 | 11/8/2006 | 5.0 | <0.051 | **0.037** | **0.12** | <0.0050 | **0.15** | **0.037** | <0.0083 | **0.23** | **0.2** | **0.0085** | **0.03** |
| B026-C7 | 11/8/2006 | 5.0 | <0.054 | **0.026** | **0.074** | <0.0052 | **0.11** | <0.0041 | <0.0087 | <0.012 | **0.62** | **0.0071** | **0.025** |
| B026-D1 | 11/8/2006 | 5.0 | <0.049 | **0.044** | **0.14** | <0.0048 | **0.18** | <0.0038 | <0.0079 | **0.18** | <0.0038 | **0.011** | **0.042** |
| B026-D2 | 11/9/2006 | 4.0 | <0.22 | **0.035** | **0.11** | <0.021 | **0.14** | <0.017 | **0.056** | **0.96** | <0.017 | <0.016 | <0.031 |
| B026-D3 | 11/9/2006 | 5.0 | <0.051 | **0.061** | **0.2** | <0.005 | **0.25** | **0.017** | **0.11** | **7.2** | **0.15** | **0.0096** | **0.033** |
| B026-D4 | 11/9/2006 | 4.0 | <0.28 | **0.13** | **0.37** | **0.078** | **0.59** | **0.33** | **0.17** | **15** | **0.56** | **0.025** | **0.045** |
| B026-D5 | 11/9/2006 | 4.5 | <0.49 | **0.034** | **0.1** | <0.048 | **0.12** | <0.038 | <0.079 | **100** | <0.038 | <0.035 | <0.069 |
| B026-D6 | 11/9/2006 | 4.5 | <0.49 | <0.03 | **0.081** | <0.047 | **0.1** | <0.038 | <0.079 | **55** | **0.18** | <0.034 | <0.069 |
| B026-D7 | 11/9/2006 | 5.0 | <0.7 | **0.052** | **0.17** | <0.069 | **0.34** | <0.054 | <0.11 | **120** | <0.0555 | <0.05 | <0.099 |
| WV-02-A | 11/9/2006 | 5.0 | <0.051 | **0.072** | **0.19** | **0.035** | **0.21** | **0.23** | **0.12** | **31** | **0.38** | **0.019** | **0.059** |
| WV-02-B | 11/9/2006 | 5.0 | <0.051 | **0.023** | **0.069** | **0.079** | **0.075** | **0.046** | **0.010** | **58** | **0.59** | **0.0051** | **0.019** |
| WV-02-C | 11/9/2006 | 5.0 | <0.050 | **0.041** | **0.13** | **0.021** | **0.14** | <0.0038 | **0.11** | **9.8** | **0.075** | **0.0096** | **0.033** |
| WV-02-C DUPLICATE | 11/9/2006 | 5.0 | <0.053 | **0.025** | **0.083** | **0.011** | **0.097** | <0.0041 | **0.070** | **4.3** | **0.042** | **0.0051** | **0.017** |
| WV-02-D | 11/9/2006 | 5.0 | <0.052 | **0.015** | **0.036** | <0.0051 | **0.044** | <0.0041 | **0.014** | **12** | <0.0041 | <0.0037 | **0.0091** |
| B026-CLARIFIER-A1 | 11/10/2006 | 5.0 | <0.053 | **0.051** | **0.16** | <0.0052 | **0.15** | <0.0041 | **0.013** | **28** | **0.050** | **0.011** | **0.049** |
| B026-CLARIFIER-A2 | 11/10/2006 | 10.0 | <0.056 | **0.083** | **0.24** | **0.017** | **0.21** | **0.0043** | **0.017** | **45** | **0.081** | **0.020** | **0.085** |

**Notes:**
< = the analyte was not detected above the detection limi
bgs = below ground surface

Results shown in micrograms per liter (ug/L) of vapor
Numbers in bold denote a detection above the laboratory reporting limit; only detected constituents are included on this table.

(a) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005* ).

**Table 4.8**
**Summary of Confirmation Soil Sampling Results - Building 026 Clarifier**
**January 15, 2007**
**Hitachi GST**
**San Jose, California**

| Chemical | Remedial Goal (RG) (a) | 026 CLARIFIER-A | 026 CLARIFIER-B | 026 CLARIFIER-C | 026 CLARIFIER-D | 026 CLARIFIER-E | 026 CLARIFIER-F | 026 CLARIFIER-G | 026 CLARIFIER-H |
|---|---|---|---|---|---|---|---|---|---|
| | | 4 ft bgs | 4.5 ft bgs | 4.5 ft bgs | 4.5 ft bgs | 4.5 ft bgs | 4 ft bgs | 4 ft bgs | 9 ft bgs |
| **Volatile Organic Compounds (mg/kg)** | | | | | | | | | |
| Trichloroethene | *0.019* | < 0.0042 | < 0.0053 | < 0.0038 | < 0.004 | < 0.0046 | < 0.0041 | < 0.0049 | **0.0071** |
| **Total Petroleum Hydrocarbons (mg/kg)** | | | | | | | | | |
| TPH-Diesel | *5,200* | **2.3** | **2.6** | **4.7** | < 0.98 | **41** | **2.9** | < 0.99 | < 0.95 |
| TPH-Motor Oil | *2,300* | < 50 | < 48 | < 48 | < 49 | **79** | < 49 | < 49 | < 47 |
| **Metals (mg/kg)** | | | | | | | | | |
| Antimony | *31* | **3.4** | < 2.0 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| Arsenic | *12* | **1.2** | **5.8** | **5.7** | **7.2** | **3.4** | **6** | **6.9** | **7.3** |
| Barium | *5,400* | **22** | **130** | **130** | **180** | **75** | **210** | **130** | **200** |
| Beryllium | *150* | < 0.5 | < 0.49 | **0.49** | **0.6** | < 0.49 | **0.5** | **0.56** | **0.61** |
| Cadmium | *77* | < 0.5 | < 0.49 | < 0.49 | < 0.49 | < 0.49 | < 0.48 | < 0.48 | < 0.48 |
| Chromium | *120,000* | **380** | **74** | **50** | **45** | **25** | **42** | **46** | **42** |
| Cobalt | *900* | **57** | **13** | **11** | **13** | **6.9** | **10** | **12** | **12** |
| Copper | *3,100* | **8.1** | **25** | **25** | **31** | **25** | **27** | **30** | **30** |
| Lead | *150* | < 1.0 | **10** | **9.2** | **8.5** | **6.6** | **8.4** | **7.9** | **7.4** |
| Mercury | *23* | < 0.05 | **0.061** | **0.088** | **0.057** | < 0.05 | **0.089** | **0.064** | **0.061** |
| Molybdenum | *390* | <1.0 | <0.98 | <0.97 | <0.98 | <0.97 | <0.96 | <0.96 | <0.96 |
| Nickel | *1,500* | **1,100** | **110** | **86** | **67** | **43** | **58** | **67** | **66** |
| Silver | *390 (b)* | < 1.0 | < 0.98 | **1.9** | < 0.98 | < 0.97 | **3.3** | < 0.96 | < 0.96 |
| Thallium | *5.2 (b)* | <1.0 | <0.98 | <0.97 | <0.98 | <0.97 | <0.96 | <0.96 | <0.96 |
| Vanadium | *78* | **15** | **27** | **26** | **32** | **15** | **26** | **29** | **31** |
| Zinc | *23,000* | **15** | **43** | **45** | **53** | **43** | **46** | **51** | **50** |
| **pH** | | | | | | | | | |
| pH | -- | **8.35** | **8.42** | **8.31** | **8.45** | **8.37** | **8.3** | **8.33** | **9.08** |

**Notes:**
bgs = below ground surface
ft = feet
mg/kg = milligrams per kilogram
< = not detected at the listed reporting limit

Sample was analyzed for VOCs, TPH, metals, and pH. Only detected VOCs are included in the table; other VOCs were detected below laboratory reporting limits. Only metals detected on the Redevelopment Property are included in the table.

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON. Dated June 28, 2006; Revised August 31, 2006.* )

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*

**Table 4.9**
**Summary of Stockpile Sampling Results - Building 026 Clarifier**
**January 15, 2007**
**Hitachi GST**
**San Jose, California**

| Chemical | Remedial Goal (RG) (a) | 026 CLARIFIER-STOCKPILE |
|---|---|---|
| | | 0-0.5 ft |
| **Volatile Organic Compounds (VOCs) (mg/kg)** | | |
| Freon 12 (Dichlorodifluoromethane) | *0.37 (b)* | **0.015** |
| **Total Petroleum Hydrocarbons (TPH) (mg/kg)** | | |
| TPH-Diesel | *5,200* | **4.4** |
| TPH-Motor Oil | *2,300* | < 48 |
| **Metals (mg/kg)** | | |
| Antimony | *31* | < 2.0 |
| Arsenic | *12* | **6** |
| Barium | *5,400* | **140** |
| Beryllium | *150* | < 0.50 |
| Cadmium | *77* | < 0.50 |
| Chromium | *120,000* | **47** |
| Cobalt | *900* | **11** |
| Copper | *3,100* | **26** |
| Lead | *150* | **8.3** |
| Mercury | *23* | **0.054** |
| Molybdenum | *390* | <1.0 |
| Nickel | *1,500* | **72** |
| Silver | *390 (b)* | **4.7** |
| Thallium | *5.2 (b)* | <1.0 |
| Vanadium | *78* | **28** |
| Zinc | *23,000* | **47** |
| **pH** | | |
| pH | -- | **8.35** |

**Notes:**
bgs = below ground surface
ft = feet
mg/kg = milligrams per kilogram
< = not detected at the listed reporting limit

Sample was analyzed for VOCs, TPH, metals, and pH. Only detected VOCs are included in the table; other VOCs were detected below laboratory reporting limits. Only metals detected on the Redevelopment Property are included in the table.

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared for ENVIRON. Dated June 28, 2006; Revised August 31, 2006.)*

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*

**Table 4.10**
**Summary of Soil Sampling Results - Black Soil in Parking Lot South of Building 026**
**October 12, 2006**
**Hitachi GST**
**San Jose, California**

| Chemical | Remedial Goal (a) | 026S PARKING LOT-1 |
|---|---|---|
| | | 0-0.5 ft bgs |
| **Volatile Organic Compounds (VOCs) (mg/kg)** | | |
| Acetone | *200* | **0.055** |
| **Semi-Volatile Organic Compounds (SVOCs) (mg/kg)** | | |
| Diethyl phthalate | *49,000 (b)* | **0.17** |
| **Total Petroleum Hydrocarbons (TPH) (mg/kg)** | | |
| TPH-Diesel | *5,200* | **68** |
| TPH-Motor Oil | *2,300* | **560** |
| **Metals (mg/kg)** | | |
| Antimony | *31* | <1.9 |
| Arsenic | *12* | **6.6** |
| Barium | *5,400* | **180** |
| Beryllium | *150* | <0.49 |
| Cadmium | *77* | <0.49 |
| Chromium | *120,000* | **41** |
| Cobalt | *900* | **11** |
| Copper | *3,100* | **39** |
| Lead | *150* | **27** |
| Mercury | *23* | <0.052 |
| Molybdenum | *390* | <0.97 |
| Nickel | *1,500* | **58** |
| Silver | *390 (b)* | <0.97 |
| Thallium | *5.2 (b)* | <0.97 |
| Vanadium | *78* | **32** |
| Zinc | *23,000* | **68** |
| **pH** | | |
| pH | -- | **7.12** |

**Notes:**

bgs = below ground surface

ft = feet

mg/kg = milligrams per kilogram

< = not detected at the listed reporting limit

Sample was analyzed for VOCs, SVOCs, TPH, metals, and pH. Only detected VOCs and SVOCs are included in the table; other VOCs and SVOCs were detected below laboratory reporting limits. Only metals detected on the Redevelopment Property are included in the table.

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON. Dated June 28, 2006; Revised August 31, 2006.)*

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*

**TABLE 4.11**
**Summary of Confirmation Soil Sampling Results**
**Former Building 018 Black Pipe-Backfill Excavation**
**April 19, 2007**
**Hitachi GST**
**San Jose, California**

| Sample ID | Sample Depth (ft bgs) | TPH - Diesel (mg/kg) | TPH - Motor Oil (mg/kg) |
|---|---|---|---|
| *Remedial Goal (RG) (mg/kg) (a)* | | *5,200* | *2,300* |
| B018-EXCB-A1 | 5 | **3.9** | <46 |
| B018-EXCB-B1 | 4.5 | **19** | <50 |
| B018-EXCB-C1 | 3.5 | **6.6** | <50 |
| B018-EXCB-D1 | 3 | **45** | **99** |
| B018-EXCB-D2 | 3.5 | **5.4** | <48 |
| B018-EXCB-D3 | 3.5 | **6.9** | <48 |
| B018-EXCB-D4 | 2.5 | **17** | <47 |
| B018-EXCB-D5 | 2.5 | **5.4** | <50 |
| B018-EXCB-D6 | 3 | **14** | <50 |
| B018-EXCSW-A1 | 2.5 | **8.2** | <46 |
| B018-EXCSW-D6 | 1.5 | **9.3** | <50 |
| B018-EXCSW-E1 | 1.5 | **21** | <47 |
| B018-EXCSW-F1 | 1.5 | **24** | **54** |
| B018-EXCSW-E2 | 1.5 | **32** | **76** |
| B018-EXCSW-F2 | 2 | **38** | **84** |
| B018-EXCSW-E3 | 1.5 | **85** | **160** |
| B018-EXCSW-F3 | 1.5 | **38** | **68** |
| B018-EXCSW-E4 | 1.5 | **38** | **81** |
| B018-EXCSW-F4 | 2 | **44** | **76** |

**Notes:**
bgs = below ground surface
ft = feet
mg/kg = milligrams per kilogram
TPH = Total Petroleum Hydrocarbons
< = not detected at the listed reporting limit

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON. Dated June 28, 2006; Revised August 31, 2006.)*

**Table 4.12**
**Summary of Soil Sampling Results - Black Soil Under Raleigh Road**
**March 7, 2007**
**Hitachi GST**
**San Jose, California**

| Chemical | Remedial Goal (RG) (a) | RaleighRd-S1 |
|---|---|---|
| | | 0-0.5 ft bgs |
| **Total Petroleum Hydrocarbons (TPH) (mg/kg)** | | |
| TPH-Diesel | *5,200* | **20** |
| TPH-Motor Oil | *2,300* | **69** |
| **Metals (mg/kg)** | | |
| Antimony | *31* | <1.9 |
| Arsenic | *12* | **6.5** |
| Barium | *5,400* | **170** |
| Beryllium | *150* | **0.77** |
| Cadmium | *77* | <0.48 |
| Chromium (total) | *120,000* | **44** |
| Cobalt | *900* | **12** |
| Copper | *3,100* | **31** |
| Lead | *150* | **11** |
| Mercury | *23* | **0.093** |
| Molybdenum | *390* | <0.96 |
| Nickel | *1,500* | **66** |
| Silver | *390 (b)* | <0.96 |
| Thallium | *5.2 (b)* | <0.96 |
| Vanadium | *78* | **33** |
| Zinc | *23,000* | **53** |

**Notes:**
bgs = below ground surface
ft = feet
mg/kg = milligrams per kilogram
< = not detected at the listed reporting limit

Sample was analyzed for VOCs, TPH, and metals. VOCs were not detected at concentrations above the reporting limits. Only metals detected on the Redevelopment Property are included in the table.

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON. Dated June 28, 2006; Revised August 31, 2006.* )

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*

**Table 4.13**
**Summary of Soil Sampling Results - Black Soil in Parking Lot East of Building 051**
**April 26, 2007**
**Hitachi GST**
**San Jose, California**

| Chemical | Remedial Goal (RG) (a) | B051-PL-S1 |
|---|---|---|
| | | 0-0.5 ft bgs |
| **Volatile Organic Compounds (VOCs) (mg/kg)** | | |
| Acetone | *200* | **0.11** |
| **Total Petroleum Hydrocarbons (TPH) (mg/kg)** | | |
| TPH-Diesel | *5,200* | **2.6** |
| TPH-Motor Oil | *2,300* | <49 |
| **Metals (mg/kg)** | | |
| Antimony | *31* | <2.0 |
| Arsenic | *12* | **6.9** |
| Barium | *5,400* | **150** |
| Beryllium | *150* | <0.50 |
| Cadmium | *77* | <0.50 |
| Chromium (total) | *120,000* | **97** |
| Cobalt | *900* | **16** |
| Copper | *3100* | **29** |
| Lead | *150* | **18** |
| Mercury | *23* | **0.064** |
| Molybdenum | *390* | <0.99 |
| Nickel | *1,500* | **160** |
| Silver | *390 (b)* | <0.99 |
| Thallium | *5.2 (b)* | <0.99 |
| Vanadium | *78* | **31** |
| Zinc | *23,000* | **49** |
| **pH** | | |
| pH | -- | **7.20** |

**Notes:**

bgs = below ground surface

ft = feet

mg/kg = milligrams per kilogram

< = not detected at the listed reporting limit

Sample was analyzed for VOCs, TPH, metals, and pH. Only detected VOCs are included in the table; other VOCs were detected below laboratory reporting limits. Only metals detected on the Redevelopment Property are included in the table.

Results detected above the reporting limit are shown in **bold**.

(a) Remedial goals (RGs) as presented in the Corrective Measures Study for the Redevelopment Property. (*Source: Corrective Measures Study (CMS) Report, Redevelopment Property, Hitachi Global Storage Technologies, Inc., 5600 Cottle Road, San Jose, California. Prepared by ENVIRON. Dated June 28, 2006; Revised August 31, 2006.)*

(b) Risk-Based Target Concentrations (RBTCs) for residential land use. For chemicals not detected during previous Site investigations, a RBTC was developed using the exposure assumptions and methodology described in the Current Conditions Report (CCR) (*Source: Draft CCR, Hitachi Global Technologies, Inc., Redevelopment Area and Endicott Boulevard/Tucson Way, 5600 Cottle Road, San Jose, California. Prepared by ENVIRON, July 2005).*